



City of
Rockville
Get Into It

**Historic District Commission
Staff Report: RETROACTIVE Certificate of Approval
HDC2013-00608, 200 W. Jefferson Street**

MEETING DATE: 1/17/2013

REPORT DATE: 1/10/2013

FROM: Robin D. Ziek, Preservation Planner,
Planning, CPDS
240.314.8236
rziek@rockvillemd.gov

APPLICATION DESCRIPTION: Retroactive Certificate of Approval for porch enclosure modifications

APPLICANT: Tom Orban
200 W. Jefferson Street
Rockville, MD 20850

FILING DATE: 12/20/12

RECOMMENDATION: Review existing alterations. Staff recommends denial of the existing work, but recommends approval of proposed alterations to the design to provide vertical orientation of porch glazing on all three sides.

EXECUTIVE SUMMARY: The applicant is a recent purchaser of the property and had thought that the proposed work would not need HDC review as the porch had previously been glass enclosed. Staff has discussed the parameters of HDC review for all alterations with the applicant.

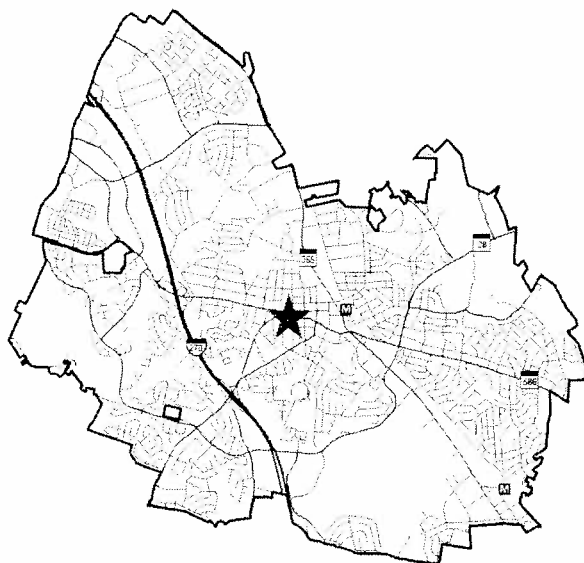


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Front (east) elevation

RECOMMENDATION

Staff finds that the existing porch enclosure, as recently modified by the applicant without approval, to be incompatible with the vertical elements of the historic resource, and recommends redesign of the porch enclosure to reduce the incompatibility.

SITE DESCRIPTION

Location: 200 W. Jefferson Street
Applicant: Tom Orban
Land Use Designation: Restricted Residential
Zoning District: R-90 HD
Existing Use: Residential
Parcel Area: 14,374 sf
Subdivision: Exchange and New Exchange

Vicinity

Surrounding Land Use and Zoning			
Location	Zoning	Planned Land Use	Existing Use
North	R-90 HD	Detached, Restricted Residential Historic District overlay	Residential
East	R-90	Detached, Restricted Residential	Residential – non-profit office
South	R-90	Detached, Restricted Residential	Residential
West	R-90	Detached, Restricted Residential	Residential

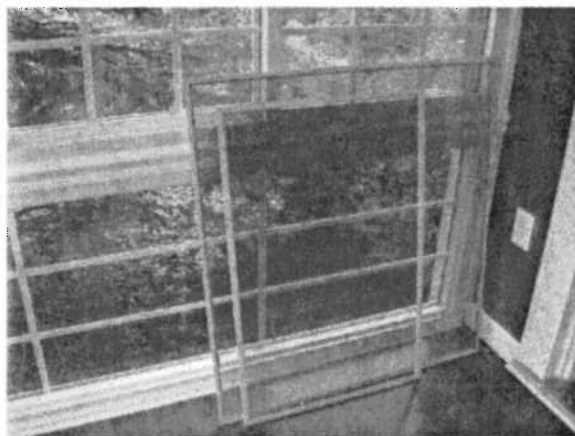


2004 Photograph of porch enclosure. The then-owners requested HDC approval to remove the top railing, and this was approved.

Key Features include the four columns across this north elevation, with thinner vertical mullions separating paired groupings of window inserts.

The two vertical bays on the east and west elevation are wider than the six vertical bays on the north elevation.

Glass Inserts from prior porch enclosure





North (side) elevation (2012)



(2012) Porch glazing detail – north and west porch elevations

Site Analysis:

The subject property is located at the intersection of West Jefferson Street, West Montgomery Avenue, and South Van Buren Street. It is a corner lot, sitting adjacent to a portion of the intersection improved to resemble small public park and has high public visibility at this strategic intersection within the West Montgomery Avenue Historic District. The property is associated with Sophia Higgins, about whom there is much known for activities during the Civil War (see Attach 5-7). The Sanborn Map of 1924 depicts a wrap-around front porch, while the 1949 Sanborn Map includes only the existing side porch (see Attach 4). The 1984 historic house survey notes that the front porch had already been removed, and that the side porch had already been glass enclosed (see Attach 5-3).

The applicant met with staff in January 2012, to learn more about the requirements of the City's historic preservation program. At that time, staff noted that all changes to the exterior of a designated resource must have prior HDC approval.

The applicant understood this to mean that, since the side porch had already been enclosed with glass, it would not be a change to upgrade the glass enclosure. However, the existing design does not match the prior glass enclosure in terms of design or materials. The applicant now understands that the work that he undertook to install a new system to enclose the side porch does constitute a change and must be reviewed by the HDC. While the review is after the fact, the Retroactive Certificate of Approval review by the HDC is undertaken as a new review and may result in the removal of the work currently in place if the proposal is not approved.

DISCUSSION OF THE PROPOSED PROJECT and MATERIALS

Existing Conditions: The side porch has been permanently enclosed with large thermally-glazed windows with two distinct configurations. The north elevation has three bays with six panels. Both the east and west elevations have one bay with three large horizontal panels. The central panel on both elevations consists of glass and screen segments to provide an opportunity for fresh air ventilation. The new window segments have grill inserts between the glass to approximate the appearance of smaller panes of glass.

Preservation Guidance on Porch Enclosures: In general, when an open porch is enclosed, it is recommended to provide a thin framework that includes maximum glazing and/or screening to continue the visual effect of the open porch, while preserving the character-defining elements of the porch.

The example in this photo illustrates the enclosure of what appears to be a 2nd story sleeping porch. The multiple windows maintain an open wall identity of a porch, standing in contrast to the adjacent solid wall with the small window.

The National Park Service discusses the character-defining elements of a porch, such as porch columns (see Attachment 8). Staff notes that the current enclosure retains the prior porch column spacing, but



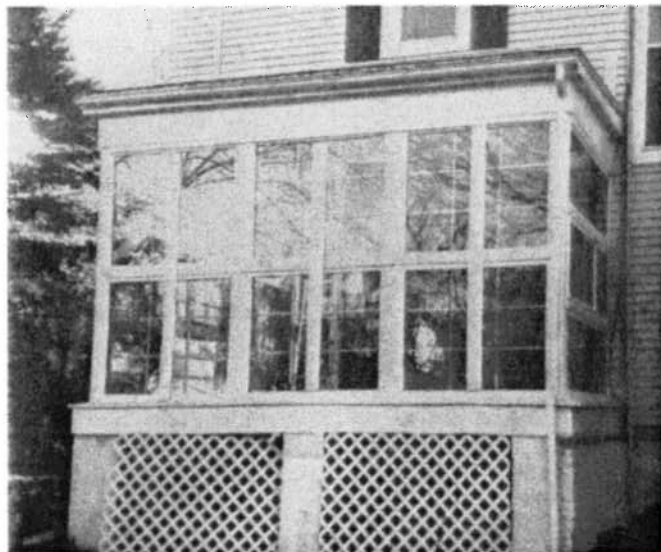
seems to lack columnar definition by installing a horizontal mullion with the same “weight” as the vertical mullions/columns.

The National Park Service also discusses the use of substitute materials for porch enclosures. Staff notes that the prior porch enclosure was metal/aluminum and therefore the use of substitute materials may be considered. The applicant has installed a vinyl product, with integral color. Use of this substitute material may be appropriate on a secondary feature such as this side porch, as this is not a primary element as would be a front porch, and it is not an original feature of the house, which originally had a wrap-around porch.

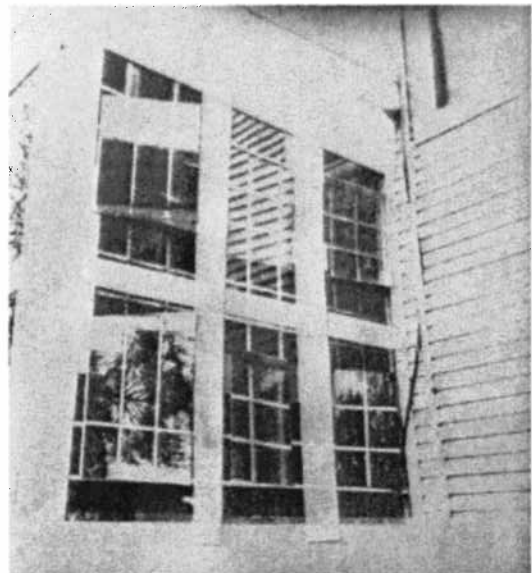
Staff Recommendation (Existing porch enclosure): The existing porch enclosure is incompatible with the historic resource because the installation is internally inconsistent in design, with the east and west elevations having a distinctly different design from the north elevation. In addition, the overall design emphasizes a horizontal orientation while the house is a typical Victorian design with a vertical orientation. Orientation is a character-defining element of architectural design, and Victorian resources emphasized the “vertical.” This stands in contrast to early 20th century architecture, such as the Prairie Style, where horizontality was key. While these concepts apply broadly, the historic resource at 200 West Jefferson illustrates a vertical orientation, with steep ridge lines and narrow/tall windows.

The use of interior grills to present an aspect of small panes of glass is inappropriate in that today's technology would allow large panes of glass that would provide a more open aspect to the porch. Small panes of glass are seen in the Victorian period where large expanses of glass are used, such as in greenhouses. The use of grills may be considered a secondary design element if the other primary design issues are addressed, although staff notes that the grills will not relate logically to the larger structural elements.

Modified proposal: Based on discussions with staff, the owner has offered a proposal to alter the current installation as shown below:



Proposed North Elevation



Proposed East and West Elevations

The owner proposes to add vertical mullions on the north elevation between each of the existing column/vertical elements. The new vertical mullions would be installed on the exterior of the glass, and would be notably narrower than the column verticals to retain emphasis on the columns. On the shorter east and west elevations, the owner proposes to reinstall the three horizontal units as vertical units, or a configuration as illustrated that would achieve the same result.

Staff finds this proposal to be acceptable in that it would change the proportions of these porch openings to the more narrow, vertical orientation that is compatible with the Victorian resource. Staff recommends that the HDC approve this alternative, provided that additional details concerning materials, grill installation and dimensions such as the mullion width are confirmed at or prior to the meeting.

COMMUNITY OUTREACH

Posting of sign on property three weeks prior to meeting.

Postcard notices sent out two weeks prior to meeting.

Staff report posted on City's web site one week prior to meeting.

FINDINGS

Finding that the existing porch configuration is incompatible with the Victorian resource, and does not meet Secretary of the Interior's Standards # 6 or #9 because the existing work is not compatible with the size, scale and proportion of the original resource; and also finding that a porch glazed enclosure does meet Secretary of the Interior's Standards # 2 and 3 because this side porch is different from the original Victorian wrap around porch, and the owner purchased the house with a glazed porch enclosure; staff recommends that the existing porch enclosure should be revised to a design that is compatible with the historic resource.

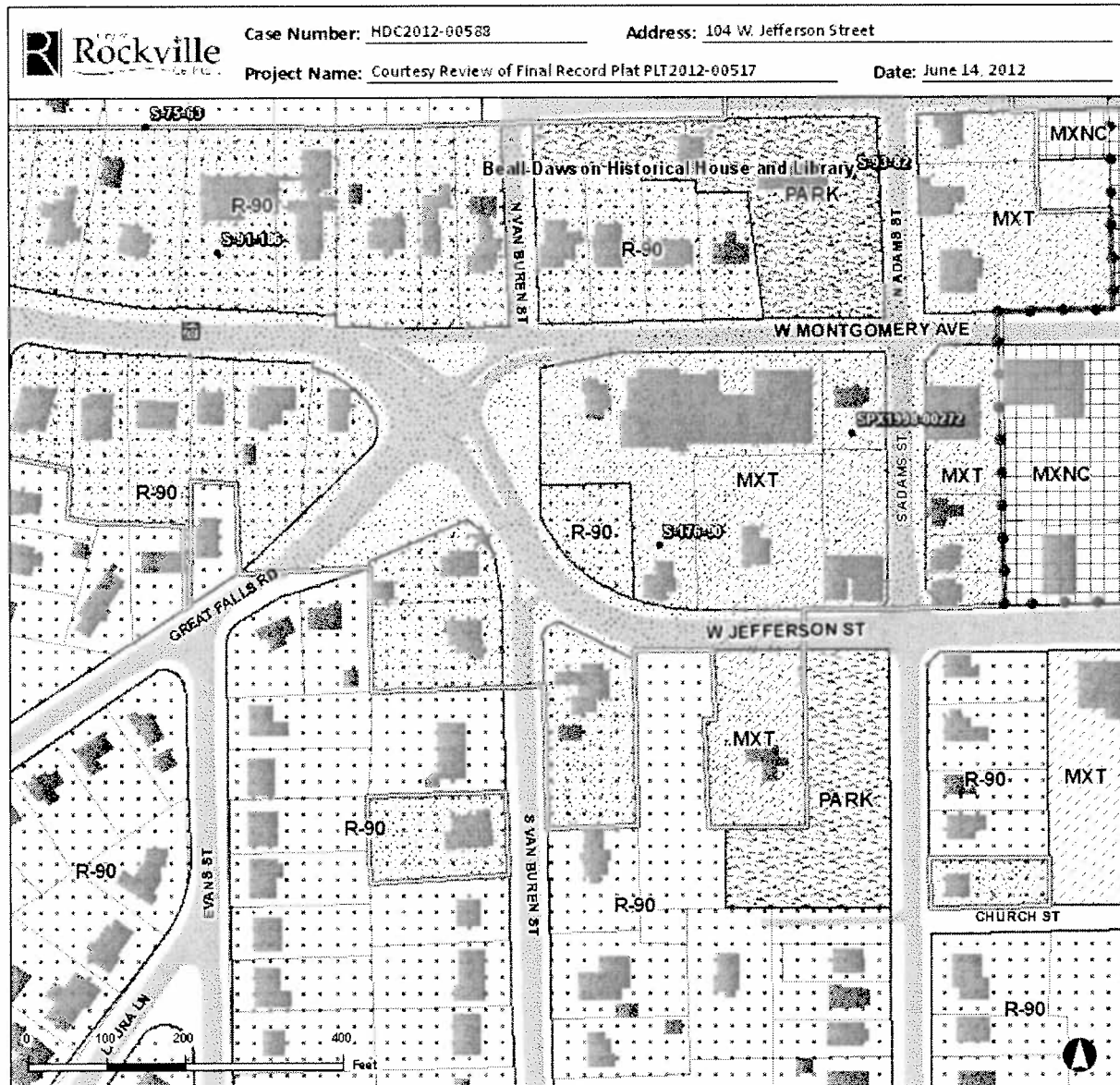
ATTACHMENTS

1. Secretary of the Interior's Standards for Rehabilitation
2. Aerial Map
3. Zoning Map
4. Application
5. Historic site information (Sanborn Maps, MHT form)
6. Proposed renovation to existing (unapproved) work
7. Letter received
8. Preservation Brief #45

Secretary of the Interior's Standards for Rehabilitation

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. *The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.*
3. *Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.*
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. **Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.**
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. **New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.**
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.





★ Project Location

Legend

- | | | |
|--|-------------------------------------|--|
| R-400 - Residential Estate | RMD-10 - Residential Medium Density | MXC - Mixed-Use Commercial |
| R-200 - Suburban Residential | RMD-15 - Residential Medium Density | MXCD - Mixed-Use Corridor District |
| R-150 - Low Density Residential | RMD-25 - Residential Medium Density | MXE - Mixed-Use Employment |
| R-90 - Single Unit Detached Dwelling, Restricted Residential | PD - Planned Development | MXNC - Mixed-Use Neighborhood Commercial |
| R-75 - Single Unit Detached Dwelling, Residential | IL - Light Industrial | MXT - Mixed-Use Transition |
| R-60 - Single Unit Detached Dwelling, Residential | PARK - Park Zone | MXTD - Mixed-Use Transit District |
| R-40 - Single Unit Semi-detached Dwelling, Residential | MXB - Mixed-Use Business | Special Exceptions |
| Clusters | Historic Preservation Parcels | Twinbrook Metro Performance District |
| Planned Developments | Lincoln Park Conservation Overlay | Town Center Performance District |

200 W. Jefferson St.
Rockville, Md. 20850

December 19, 2012

City of Rockville
Department of Community Planning
Historic Preservation Office/ attn. HDC
111 Maryland Avenue
Rockville, Md. 20850-2364

Dear Commissioners: Ref. attached application


A year ago I became the latest owner and resident of the referenced Victorian, built in 1892. Since February, a contractor has been working nonstop, mostly on interior repairs. The outside of the house was painted; antennae were removed from the roof. The separate garage, which was moldy brown, was painted to match the house. When it came to the sun porch, the inspection report by Claxton Walker described what we had: "Glass Enclosed Porch: Economy grade porch enclosure, functional, needs painting at the ceiling...The floor is bouncy...there are some rotted porch floor boards...center pier has settled and leans outward..." The choice was to fix it or remove it.

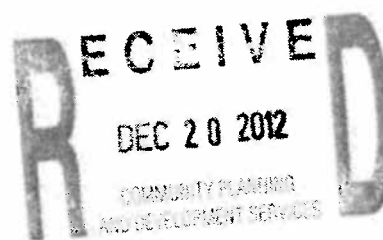
To fix it was the option selected, and when I referenced the code, I missed the section on historic buildings. The contractor reasoned that since the repairs were not structural, and we were not changing the type of material, we would not need to apply for a building permit. This is the mistake which needs to be rectified.

Please accept the attached application. For the next hearing, in January, I have worked with Robin Ziek and submit the proposal that the Committee consider approving this work retroactively.

I look forward to meeting with the Committee members come January.

Sincerely,

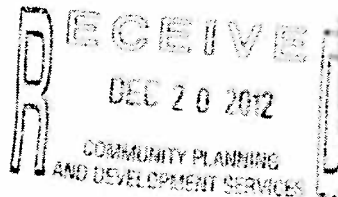

Tom Urban





Application for

Historic District Commission Review



HDC

9/12

City of Rockville

Department of Community Planning and Development Services

111 Maryland Avenue, Rockville, Maryland 20850

Phone: 240-314-8230 • Fax: 240-314-8210 • E-mail: history@rockvillemd.gov • Website: www.rockvillemd.gov/historic

Type of Application: (check all that apply)

☒ Certificate of Approval ☐ Courtesy Review ☐ Evaluation of Significance ☐ Demolition Proposed ☐ Tax Credit

Property Address Information: (please print clearly or type)

Address: 200 W. JEFFERSON ST., ROCKVILLE, MD. 20850Subdivision 0503 Lot(s) 200 Block _____Zoning RES (R-90) Tax Account(s) 00157754

Applicant Information: (please supply name, address, phone number and e-mail address for each.)

Applicant TOM ORBAN200 W. JEFFERSON ST., ROCKVILLE, MD. 20850Property Owner TOM ORBANTOM ORBAN @ MSN.COM 301-254-7776

Agent _____

SCOPE OF WORK

<input type="checkbox"/> FENCE	<input type="checkbox"/> MATURE TREE REMOVAL	<input type="checkbox"/> CHIMNEY
<input type="checkbox"/> SIDING/TRIM	<input type="checkbox"/> WINDOWS/DOORS	<input type="checkbox"/> MISCELLANEOUS
<input type="checkbox"/> SIGNAGE	<input type="checkbox"/> ADDITION	<input type="checkbox"/> ORDINARY MAINTENANCE
<input type="checkbox"/> PARKING LOT	<input type="checkbox"/> ROOFING	<input type="checkbox"/> NEW CONSTRUCTION
<input type="checkbox"/> LANDSCAPING	<input type="checkbox"/> ACCESSORY BUILDING	<input checked="" type="checkbox"/> OTHER

Project Description SUNROOM WINDOW REPLACEMENT

STAFF USE ONLY

Application Acceptance:

Application # HDC-2013-00608

Pre-Application _____

Date Accepted _____

Staff Contact _____

Application Intake:

OR Date Received 12/20/12

Reviewed by _____

Date of Checklist Review _____

Deemed Complete: Yes ☐ No ☐



City of Rockville
 Department of Community Planning and Development Services
 Historic Preservation Office
 111 Maryland Ave. • Rockville, MD 20850-2364 • 240-314-8230
www.rockvillemd.gov/historic

HDC

SUBMITTAL PROCEDURES FOR HISTORIC DISTRICT COMMISSION (HDC) CERTIFICATE OF APPROVAL

Each applicant needs to be aware of the following facts about the processing of this application. After reading the following information, please sign below to acknowledge your understanding.

1. PRE-APPLICATION MEETING

A pre-application meeting with the historic preservation staff is recommended prior to filing all applications. Please call the preservation office at 240-314-8230 to schedule a meeting with staff.

2. COMPLIANCE WITH GUIDELINES

Projects must comply with the City's *Technical Guides for Exterior Alterations*, available via the Internet at www.rockvillemd.gov/historic/tech-guides.html or in printed form at the Department of Community Planning and Development Services.*

3. FILING LOCATION

Applications must be filed with the City of Rockville Community Planning and Development Services Department at 111 Maryland Avenue, Rockville, MD 20850. Applications will not be accepted until they are determined to be complete by City staff.

4. INSPECTION OF THE PROPERTY

Members of the Historic District Commission and City staff must be given the opportunity to physically inspect the subject property to help them reach a decision on the application. This opportunity must be granted provided that reasonable notice is given for said inspection.

5. HEARING/MEETING APPEARANCE

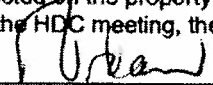
Once the application is complete, staff will set a tentative date for a public hearing by the Historic District Commission. Meetings of the Commission are held on the third Thursday of the month, in the Mayor and Council Chambers at City Hall at 7:30 p.m. The applicant, or a representative designated by the applicant, should be prepared to present his/her case before the Historic District Commission. The applicant will have the opportunity to ask questions and respond to comments at the public hearing. HDC decisions may be appealed to the Circuit Court of Montgomery County.

6. FILING DEADLINES

Applications are due five weeks preceding the regularly scheduled HDC meeting. A schedule of filing deadlines is maintained by the Planning Division, and posted on the city's website at www.rockvillemd.gov/government/commissions/hdc.

7. SIGN

A sign will be provided to you by City staff, which must be posted on the property announcing the public hearing by the Historic District Commission when the application is filed. After the HDC meeting, the sign must be removed and disposed of.


 Applicant's Signature

Dec 18, 2012
 Date

*In addition to the City's Technical Guides for Exterior Alterations (see #2 above), applicants may also find it useful to consult the following publications:

- The Secretary of the Interior's Standards for Rehabilitation: www.cr.nps.gov/hps/tps/standards/rehabilitation.htm
- The HDC's Adopted Architectural Design Guidelines: www.rockvillemd.gov/historic/guidelines1977.htm

3. This plan does not provide for the accurate identification of property boundary lines, but such identification may not be required for the transfer of title or securing financing or re-financing.

4. Building line and/or Flood Zone information is taken from available sources and is subject to interpretation of originator.

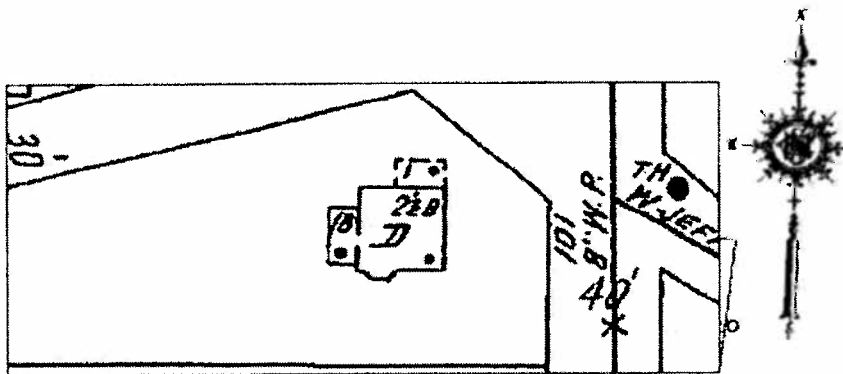
5. No Title Report furnished.

1. Setback distances as shown to the principal structure from property lines are approximate. The level of accuracy for this drawing should be taken to be no greater than plus or minus 5 feet to deed lines shown.
2. Fences, if shown, have been located by approximate methods.
3. No property corners confirmed. A boundary survey would be required to provide for a higher level of accuracy.

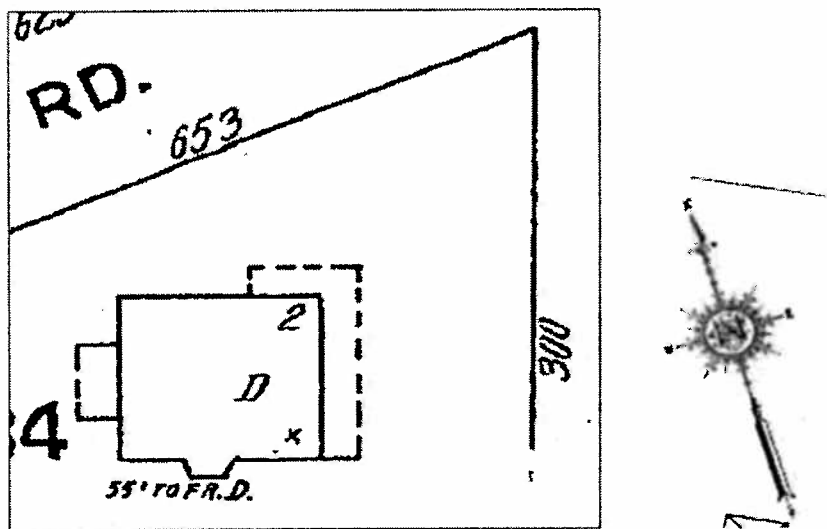


LOCATION DRAWING
M.D. AND A.P. FEIN PROPERTY
#200 W. JEFFERSON STREET
LIBER 19358 FOLIO 258
CITY OF ROCKVILLE

- Manufacturer: American Craftsman
- Building Application: Replacement
- Installation: Special Order
- Energy star Qualified Product: Yes
- Installation Zip Code: 72180
- Climate Zone: North Central
- Product Line: 4000
- Product: Picture Windows
- Series: 4100
- Product Type: Full Window
- Product Configuration: Single Picture Window
- Sizing Group: Custom
- Frame Size Width: 86 3/4"
- Frame Size Height: 29 1/4"
- Rough Opening Width: 88"
- Rough Opening Height: 30"
- Color: White
- Glazing Option: LowE Argon
- Tempered: Yes
- Obscure: No
- Tint: None
- Grid Type: Colonial Flat
- Lite Arrangement: T&H
- Mating Fin: None
- Sill Option: Sill Angle
- Head Option: Head Expander
- Foam: None
- SKU Description: SKD SERIES 8500 WINDOWS
- SKU: 710187 / SKD SERIES 8500 WINDOWS
- (4100)86 7529 23|||F 03A3C||||TD 710101



200 W Jefferson listed as 101 S. Van Buren Street in 1949 Sanborn map



200 W Jefferson listed as 300 S. Van Buren Street in 1924 Sanborn map

Maryland Historical Trust State Historic Sites Inventory Form

Sub No. 26/10/38

Magi No.

 DOE ☐ yes ☐ no

1. Name (Indicate preferred name)

historic Sophia Higgins house

and/or common Waters house

2. Location

 street & number 101 South Van Buren Street ☐ not for publication

 city, town Rockville ☐ vicinity of congressional district 8

state Maryland county Montgomery

3. Classification

Category	Ownership	Status	Present Use
<input type="checkbox"/> district	<input type="checkbox"/> public	<input checked="" type="checkbox"/> occupied	<input type="checkbox"/> agriculture <input type="checkbox"/> museum
<input checked="" type="checkbox"/> building(s)	<input checked="" type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial <input type="checkbox"/> park
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational <input checked="" type="checkbox"/> private residence
<input type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment <input type="checkbox"/> religious
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input type="checkbox"/> yes: restricted	<input type="checkbox"/> government <input type="checkbox"/> scientific
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial <input type="checkbox"/> transportation
	<input checked="" type="checkbox"/> not applicable	<input checked="" type="checkbox"/> no	<input type="checkbox"/> military <input type="checkbox"/> other:

4. Owner of Property (give names and mailing addresses of all owners)

name Ralf Neuschaeffer

street & number 101 South Van Buren Street telephone no.: 251-1027

city, town Rockville state and zip code Maryland 20850

5. Location of Legal Description

courthouse, registry of deeds, etc. Montgomery County Courthouse liber 4824

street & number Montgomery County Land Records folio 862

city, town Rockville state Maryland

6. Representation in Existing Historical Surveys

title National Register (West Montgomery Avenue Historic District) - 1974

 date locally designated Historic District - 1974 ☒ federal ☒ state ☒ county ☒ local
 M-NCPPC - 1976

depository for survey records City of Rockville

city, town Rockville state Maryland

7. Description

Survey No. M: 26/10/38

Condition

☐ excellent
☒ good
☐ fair

☐ deteriorated
☐ ruins
☐ unexposed

Check one

☐ unaltered
☒ altered

Check one

☒ original site
☐ moved date of move _____

Prepare both a summary paragraph and a general description of the resource and its various elements as it exists today.

101 South Van Buren Street is situated at the junction of South Van Buren and Jefferson Streets, a few yards southeast of Falls Road. Built in 1892, this large square three bay by three bay frame house has a high brick foundation which makes it appear taller than its 2 1/2 stories. The ridge line of the steep gable asphalt-shingled roof runs east-west, with a central brick chimney, and there are smaller gables on the front and sides of the house.

The main (east) facade on South Van Buren Street has a secondary gable with a second-story projection below; this projection now seems to be unsupported, as the original covered porch was removed some time ago. Beneath this projection, four steps lead to a small cement stoop at the entrance door; the door has side lights and a two-light transom. To the left of the projecting gable are two one-over-one windows with plain trim.

On the south side there is a cross gable from the mid-point to the rear corner of the house. Beneath the gable is a two-story, shallow three-sided bay with slightly pitched roof. The windows in each of the three facets of the bay are narrow one-over-one double-hung sash. The middle window is a double one.

Under the secondary cross gable at the north side are one-over-one windows on the first and second floors; there is one long one-over-one window lighting the interior stair landing. Although there are many double windows in the house, windows on this facade are single. A covered porch topped with railed balcony is attached to the north-northeast corner of the house; it has cinderblock piers and was enclosed by aluminum and glass/screen panels in 1975.

The rear (west) facade has two windows on the upper story and a shed-roofed attic dormer with multi-paned double windows. Behind the main block to the west is a one-story, one bay shed-roofed addition over a high cinderblock foundation. Two basement entrance doors are at ground level. On the south side of the addition a flight of stairs leads to the service porch and entrance on the first floor.

The two alterations (1940s and 1974/75) have resulted in the loss of most exterior trim and ornamentation. The front porch was removed, the side porch enclosed, shutters and window trim removed, new roofing material added and the house sheathed in light yellow aluminum siding in these two alterations, leaving little original exterior detailing. However, much of the interior trim is original -- including wide reeded door and window mouldings with bulls-eye headblocks, Eastlake-inspired front hall stairway, and the brass hardware and lighting fixtures throughout the house.

The house has been divided into apartments for some years, and is now in the process of being sold out of the Waters family. There are attractive plantings to the rear of the house, which is of a lower elevation than South Van Buren Street.

8. Significance

Survey No. M: 26/10/38

Period	Areas of Significance—Check and justify below					
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion		
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science		
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture		
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input checked="" type="checkbox"/> social		
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> art	<input type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> humanitarian		
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> theater		
<input type="checkbox"/> 1900-	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input type="checkbox"/> transportation		
		<input type="checkbox"/> invention		<input type="checkbox"/> other (specify)		

Specific dates 1892

Builder/Architect ~~XXXXXXXXXX~~

Check: Applicable Criteria: ☐ A ☐ B ☐ C ☐ D
and/or

Applicable Exception: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Level of Significance: ☐ national ☐ state ☒ local

Prepare both a summary paragraph of significance and a general statement of history and support.

This 1892 house was the last home of one of the most interesting women in 19th century Rockville. Sophia Dorothy Barnard (Higgins) was raised in a wealthy Georgetown banking family.¹ Her education, cosmopolitan attitude, business acumen and strong anti-slavery views were considered "unfeminine" and somewhat radical by Rockville society during the 1850's and 60's. In 1871 she purchased 13 acres of land bordering Great Falls Road and built a house.² Her sons built adjoining houses, resulting in that area being nicknamed "Higginsville". In 1892 she built the subject house as a residence for herself and her three unmarried daughters.³ Its attractiveness is now compromised by proximity to the intersection of three heavily traveled major arteries, and it has lost some of its shade trees and gardens to the bulldozer and pavement.

Sophia's father, Robert Barnard, came from England and set up a banking house. He was also the Treasurer of the C&O Canal Company from 1841-1846.⁴ The Barnard family's summer house "Normanstone" was located near the present site of the British Embassy on Massachusetts Avenue. Sophia was born in Georgetown in 1824. In 1847 John H. Higgins sought her hand in marriage, but agreed to leave the Higgins farm several miles east of Rockville (present Twinbrook area) and to move to town to please the urban-minded Sophia. The general merchandise store he bought in Rockville was financed by the Barnards and masterminded by Sophia. He also agreed to free his slaves.

Higgins was one of the more prominent "Unionists" in town and was arrested by J.E.B. Stuart's Confederate cavalry forces when they took Rockville in July 1863. Arrested with him were several other citizens as well as a 17 year old Union soldier named Eblen, whom Sophia had been nursing and shielding in their home on Adams Street (#101 North Adams). The attached letter from Sophia to her mother recounts the capture and eventual release.⁵

#8 CONTINUED ON P. 8.1

M: 26/10/38
101 South Van Buren St

#8 Continuation page 8.1

John Higgins was elected one of the first Town Commissioners in 1864 when that form of town government was adopted. After he died in 1870, Sophia sold the Adams Street house to settle the estate and in 1872 purchased 13 1/2 acres on Falls Road. The house she built there was #308 (demolished in 1982). The other "Higginsville" houses belonging to her sons are still standing at #300 and #304 Falls Road.

After John Higgins' death, Sophia had formally taken over the business as S.D. Higgins & Sons Company. She ran it with her two sons and son-in-law until 1888. But the Company went out of business owing many debts, and to raise capital, Sophia sold her property on Falls Road to J. Heath Dodge for \$8,000. The property included "12 1/2 acres, a good dwelling house with fruitage and fish pond".⁶

The new 1/3 acre lot Sophia purchased in 1892 was located opposite the Baptist Cemetery on Van Buren Street (once the stable lane of the Prettyman family).⁷ This site was in the midst of the rapidly developing area of newer homes in the fashionable Queen Anne/Eastlake style. Sophia's large, new house had airy verandahs on two sides (now removed or enclosed) and also had bedrooms on the first floor to better accommodate one of her maiden daughters who was crippled.

Sophia died at age 83 in 1907, and the house remained in the family until the death of her last daughter in 1936. Most of the major alterations were done after this period, but before 1950 when Hilda Waters purchased the house. It was sold in 1984 to the current owner.

Sophia's two sons later pursued military, law and real estate careers. Her daughters married into the merchant and professional families of Rockville. Today her Higgins, Wilson, Welsh and Talbott grandchildren and great-grandchildren are prominent members of the Community.

FOOTNOTES

1. Most of the Barnard family information is taken from genealogical records on file at the Montgomery County Historical Society. In addition, Maud Wilson Betts (Mrs. David Betts) supplied or clarified information in an oral interview.
2. Montgomery County Land Records, Liber EBP 11, folio 87.
3. Montgomery County Sentinel May 6, 1892 and Montgomery County Tax Assessments, 1890-1894.
4. Scharf, History of Western Maryland, Vol. I, p. 713 of 1963 reprint.
5. See letter attached; Ironically, after the war Sophia got Eblen a job in her family's bank, but he embezzled funds and fled west. In later years Sophia's children would receive small sums of money signed "Eblen", but never any explanation or address.
6. Land Records, Liber JA 14, folio 482 and JA 19, folio 172 and Sentinel April 18, 1890.
7. The 1893 Tax Assessment valued the 1/3 acres of "Exchange and New Exchange" at \$250, plus improvements valued at \$2,250.

9. Major Bibliographical References

Survey No M:26/10/38

Montgomery County Land, Tax and Equity records
 Montgomery County Sentinel
 Higgins family file, Montg. Co. Historical Society
 General County histories; Scharf, History of Western Maryland

10. Geographical DataAcreage of nominated property .33 acre

Quadrangle scale _____

Quadrangle name _____

UTM References do NOT complete UTM references

5401

A
 Zone Easting Northing

B
 Zone Easting Northing

C

D

E

F

G

H

Verbal boundary description and justification

List all states and counties for properties overlapping state or county boundaries

state	code	county	code
state	code	county	code

11. Form Prepared By

name/title Anne W. Cissel
 organization Peerless Rockville date August 1984
 street & number P.O. Box 4262 telephone 762-0096
 city or town Rockville state Maryland 20850

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
 Shaw House
 21 State Circle
 Annapolis, Maryland 21401
 (301) 269-2438

PS-2746

Civil War
events
associated
with

M: 6/10/38
101 South Van Buren St.
Sophia Higgins House

APPENDIX

The following letter was written by Sophia Dorothy Barnard Higgins to her mother, Mrs. Robert Barton Barnard, of Georgetown:

Rockville
June 29, 1863

My dear Mother:

I suppose news of our tribulation reached you today. First place Saturday morning I got up to find Maria, my cook, gone, and heard during the day that Basil and Charity at William Trent's also gone. Mr. Muncaster's servant cleared out. Well, I had been expecting for the last two years to find it so, but still it was a blow. I was very busy all Saturday, and hardly got to bed, before I heard horsemen going by and the clanking of sabres and spurs. "Federal pickets", thought I, and laid me down and slept in peace. After breakfast, I was getting the children ready for Sabbath School. I saw a Federal guard with six hundred condemned horses going by to Washington. I told John to come home after school and stay with his sister, Dora, and little Frank, whilst I went to church. As John came in at the front gate, I heard a terrific yell, and there appeared what I thought were six colored men on horseback rushing up to our gate and drawing up in line. Dora screamed, "Rebels, Ma!" I thought it impossible. The next moment I saw a whole column with the Rebel Flag charging furiously down past William Brewer's, and the next a discharge of musketry and cannon in the rear, and there was a demand to know where the man who lives here was. I could with truth say he was not in. "Where was he?" and tell I did not. Eblen came running in to get us into the cellar, when the men surrounded him, saying "You are the one we are looking for" and took him, calling him a "cursed Yankee". I followed on to beg for him, but no use. I have not seen or heard from him since.

I broke through the charging columns with the pistol balls flying, rushed through the back way to the Church just in time to warn Mr. Higgins, Mr. Bowie, Mr. Dawson and Williams to stay in the Vestry room, for they, the Secessionists, were vowing vengeance on them.

I came back bringing the children through the melee. I flew to get Mr. DeSillum (the Presbyterian minister) to put himself out of the way and give John Vinson time to prepare himself. They did at Mr. Prout's, but I was too late to save Mr. Moulden and Mr. Bailey.

I remember nothing but the thick rank and clanking of sabres, yells and furious charges. They were pouring in at every lane and road from the Falls.

On my return I was beset with applications for Mr. Higgins. "Where was he?—In the Village—Could not they get in the store?"

Higgins

M: 26/38

101 South Van Buren St.
Sophia Higgins House

day night at Clagettville, where they were ordered back five miles this way and released. The reason was soon apparent, for just then they came to the advance guard of the 2nd Regular Cavalry, who were in hot pursuit. They were not permitted to stop for water, except as they crossed the streams, they dipped up a hatful. They had 300 colored men prisoners, whom they had gathered from the various farms. They slashed at them if they attempted to drink at the streams. Eblen saw one shot because he was too weak to keep up with the others. The Sergeant who had them in charge tried to beg food from the Rebels for his prisoners, but could get none. In all they marched nearly 70 miles.

What hurts me more than all is that Mr. Peter said he would go to Lee and see if he could get Eblen off. Told Lee that nothing but his being a weakly man (boy) had spared him from being clubbed to death by the Secessionists. Mr. Peter prevented me from going to Lee and Mrs. B. revealed the fact that as the last Rebels were leaving the village Judge Bowie heard them say, "Stuart's Cavalry are the elite of the Southern Army."

I could, by what I know, justly get the punishment of many prominent Secessionists, but I shall never hurt a hair of their heads. But I shall certainly tell George Peter of his treachery.

I expect to send this across the country to Colesville, as we have no mail this week.

With love to all, I am

Your affectionate daughter,
Dora B. Higgins."

M: 26 00/38
101 South Van Buren St.
Sophia Higgins House

"If I did not open that store, they would break it open." "Pull it down". "Had I the key?" "Yes, I had the key." "Well, now you have to be accommodating." I just told them if Gen. Wade Hampton or General Jeb Stuart would send one of their aides with a guard and said I must open it, I would. "Now, that is ladylike. We will pay you in Confederate script". I replied, "I take no pay for what you take. Remember, if you go into that store, I go too, but I do not wish you to have anything out of it".

It ended in my finding a Rebel Captain Cissel of Maryland, who showed me Gen. Stuart. I sent Dr. Hodges to ask him if I was compelled to open the store. He sent an order back for me to stay in front of the store "and let one of them dare to resist you." I stayed there six hours, repelling their persistent endeavors and having a full view of their movements.

There had been no firing after the first assault. A brigade of Federals came up as far as the Poor House and though too feeble to oppose the whole force, yet skirmished on the outskirts of the village. There were three brigades of Rebels in all, about 8,000. One brigade went charging down the turnpike, capturing an incoming Federal wagon train of 170 wagons. They skirmished down as far as the stone tavern (5 miles from Washington), sweeping the whole country of horses and servants. John, with bitter tears, declared his intention of taking Charlie's horse upstairs, but I took him and hid him in the bushes in the garden and saved him.

George Peter, Messrs. Miller, White and Brown, (all Secessionists) pleaded hard for the rescue of Eblen and that Union men should not be molested. Had it not been for their endeavors, every Union man would have been taken and every store laid open, for Gen. Lee had ordered such to be done, but Gen. Stuart countermanded the order at the earnest protestations of the Secessionists, for they said to carry out such an order would be their (Secessionists) entire ruin. At six the Rebels deployed out in the open fields below the village and came up a solid Column, one-half under Gen. Lee, turning out towards Brookeville, and one-half under Gen. Stuart, towards Frederick. They had a battery of six pieces. No infantry. They carried their prisoners off, compelling Capt. Vinson, tho' too ill to stand alone, to mount a horse, at the point of their sabres, and go with them.

Relieved, I thought all had gone and I went to the Church to tell my prisoners to wait another hour and they would be safe. When Mr. Bowie said, "Here comes a squad", there was an ominous "Halt" outside and the door opened. The gentlemen never stirred, I never changed my position. Emma Holland gave a slight sob. There was a dead silence, but in the growing dark I could see that Mr. Higgins and Mr. Bowie were deadly pale. Then, "Is Mr. Dawson here?". "Yes,

Mr. 26/10/38
101 South Van Buren St.
Sophia Higgins House

sir". Rising, he walked out, Emma Holland with them. The guard looked first at me. It was Captain Cissel. He hesitated then looked at Higgins. "Lieut. Wilkes, come here. I have forgotten the name." "Mr. Higgins," replied the Lieut. "Come out." I went up and threw my arms around Mr. Higgins. "Good-bye". "No leave-taking, if you please", said the Lieut. "There can be no objection to his leaving directions."

In solemn procession, we moved up the street as far as the square, when the Captain, said, "Ladies, you can go no farther". The Seccessionists gathered around Mrs. Bowie and myself declaring they had nothing to do with it. Mrs. Bowie was rather short. I said "I know positively that not one of you could have any influence today, as Gen. Stuart had a written list of all the Union men's names. *But some one here furnished that list.*" They left me alone after that.

I broke down once only, through the day and that was when the children knew that their father was a prisoner. I went down and gathered all Mr. Higgins' papers and money out of the safe. I buried the money. I sent for John and Eliza Martin (colored) to stay with me as I was alone with my children.

About one o'clock I heard the back gate slam and someone called "Dora". It was Mr. Higgins! The Rebels took him out towards Laytonsville. They met the other columns filing in from Brookeville. Somehow, they seemed uneasy about Judge Bowie and, stopping to rest, concluded they had better let him go, and besides the Federal troops were passing through Rockville and as they had no horses for the three could not hope to retain them and move rapidly.

I heard many say they were going to give Pennsylvania a taste of the war. Norwithstanding all, they behaved better than I expected; never entered the house. They had feasted on Uncle Abe's army rations. Had captured enough coffee, a *rarity*. "They did not fight for 13 dollars a month." "They were going to run all the Yankees off the face of the earth." "But we are gentlemen. We don't distress women and children and destroy dwellings."

Tuesday, the 30th
Eblen got home two o'clock this morning, so faint and exhausted that I had to help him to bed. The Rebels carried him to the confines of Carroll County. Mr. Bailey, the Postmaster, and Mr. Moulden, the Provost, were offered their liberty unconditionally at Brookeville, but Mr. Bailey refused to leave Eblen, for he feared if he wearied, they would shoot him on the road, as they did several prisoners on the march. They concluded not to leave Eblen. Bailey carried him several miles on his back. Moulden helped. They both passed their arms under his shoulders and kept him from fainting. They had not one mouthful to eat from Sunday morning till they were released at 11 o'clock Mon-



200 W Jefferson (second set of attachments)

Tom Orban

to:

robin ziek

12/19/2012 10:09 AM

Hide Details

From: Tom Orban <tomorban@msn.com>

To: robin ziek <rziek@rockvillemd.gov>

4 Attachments



sketch of side modification with rotated windows.JPG



side of porch with new windows rotated horiz to vertical.JPG



interior looking north.JPG

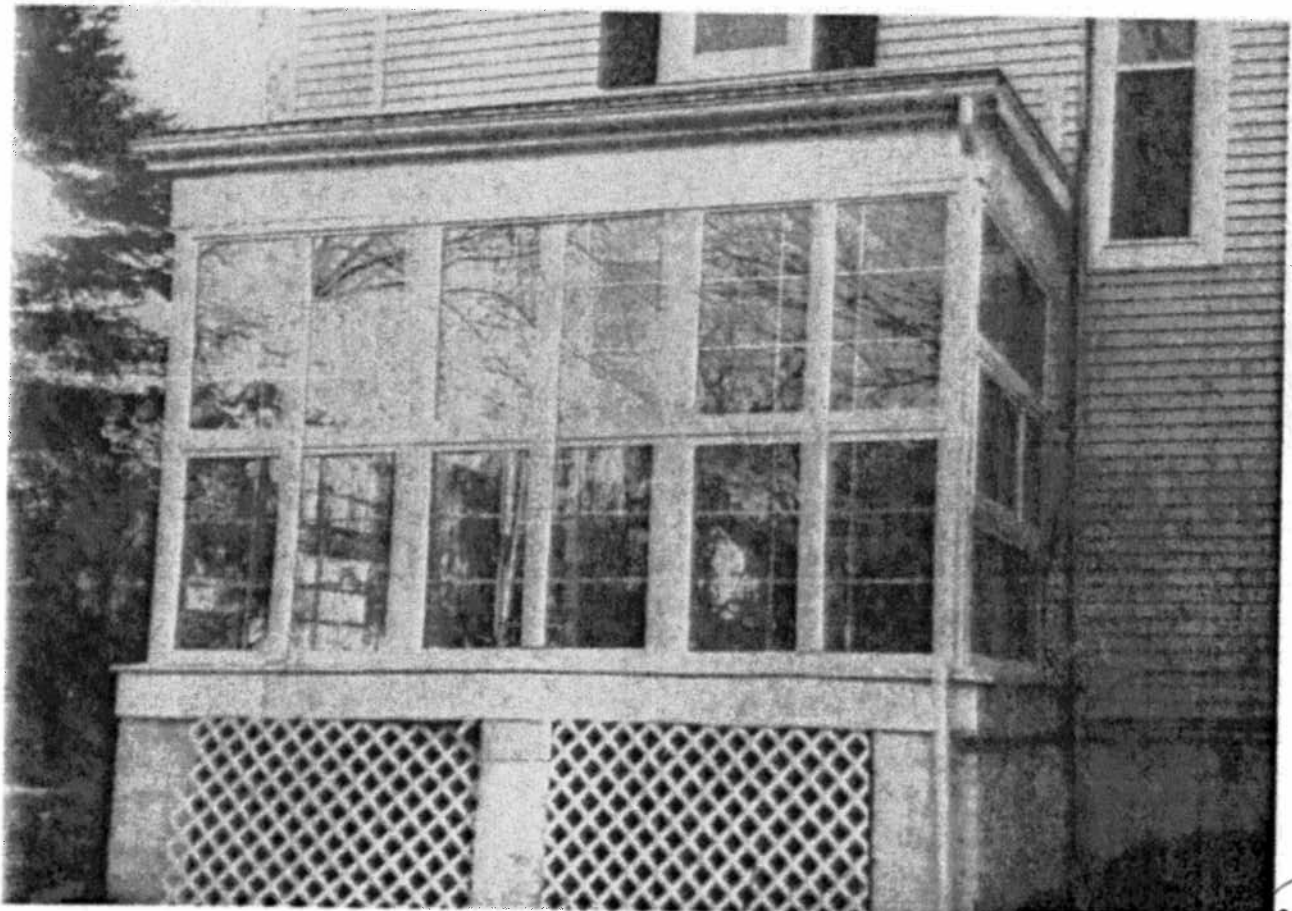


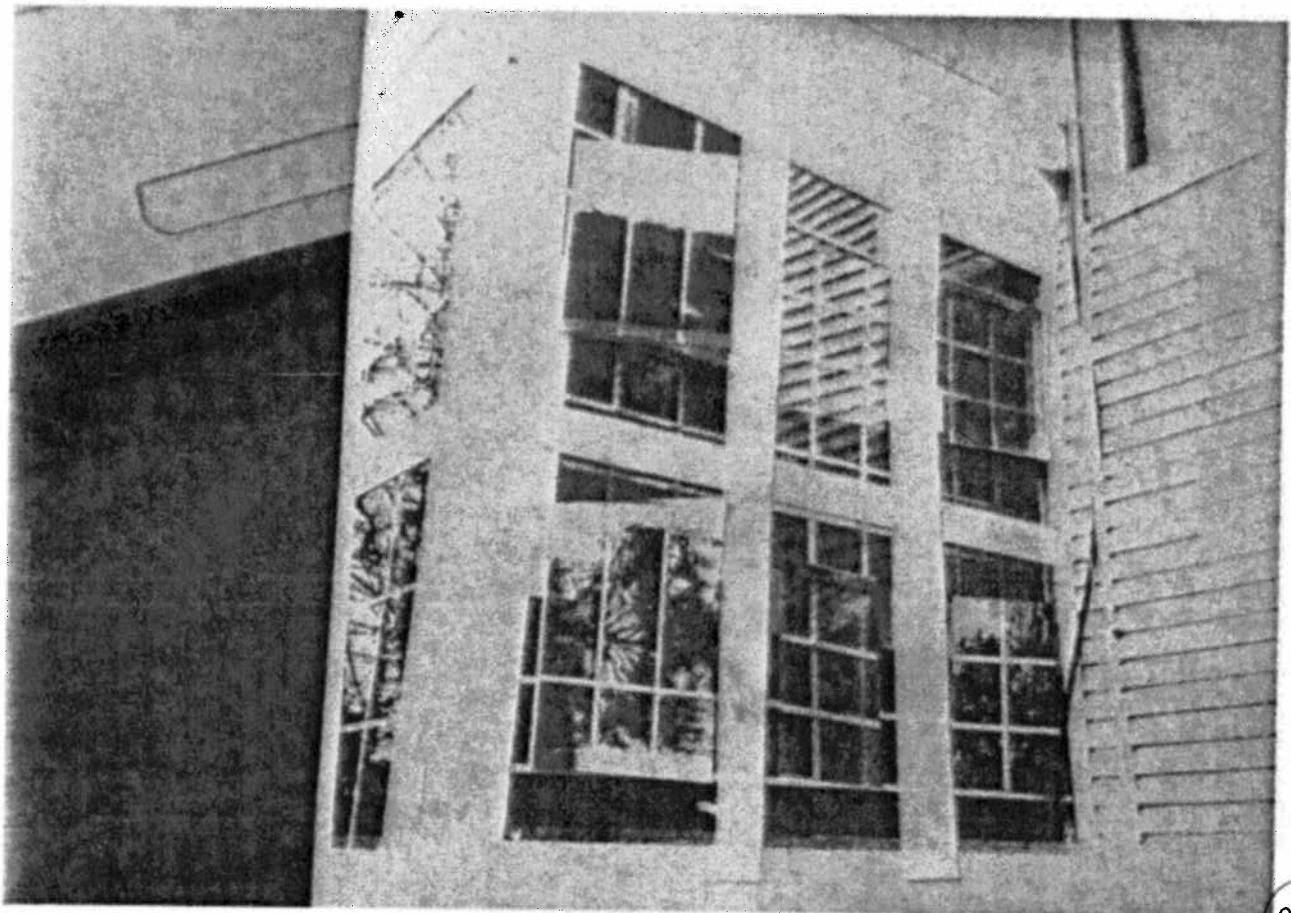
interior looking south.JPG

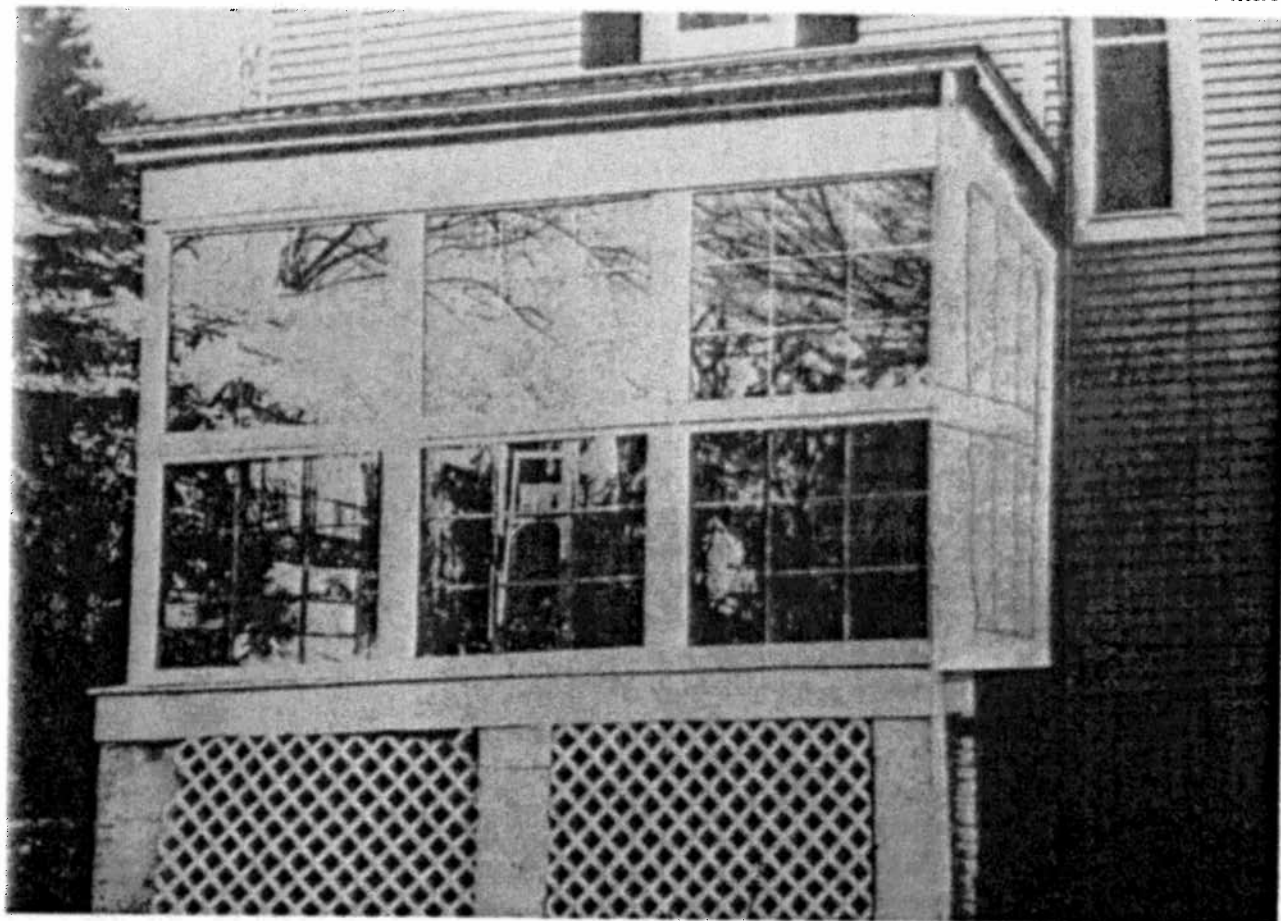
Robin,

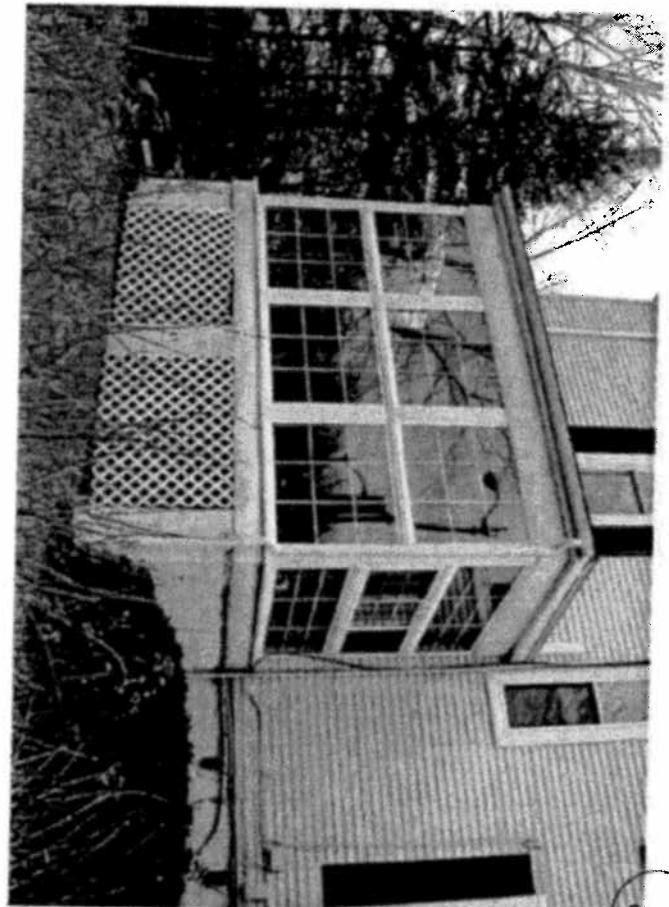
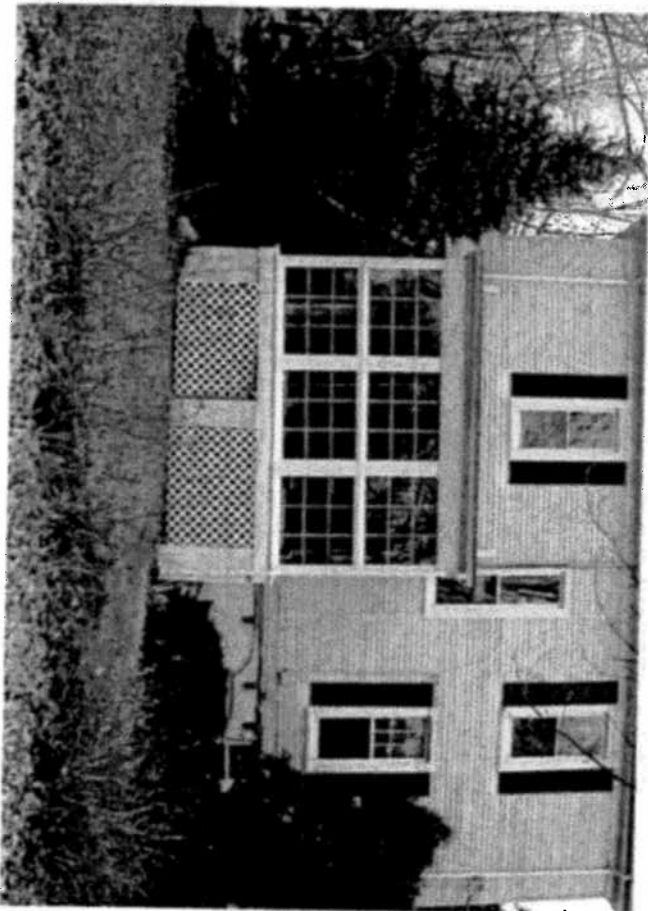
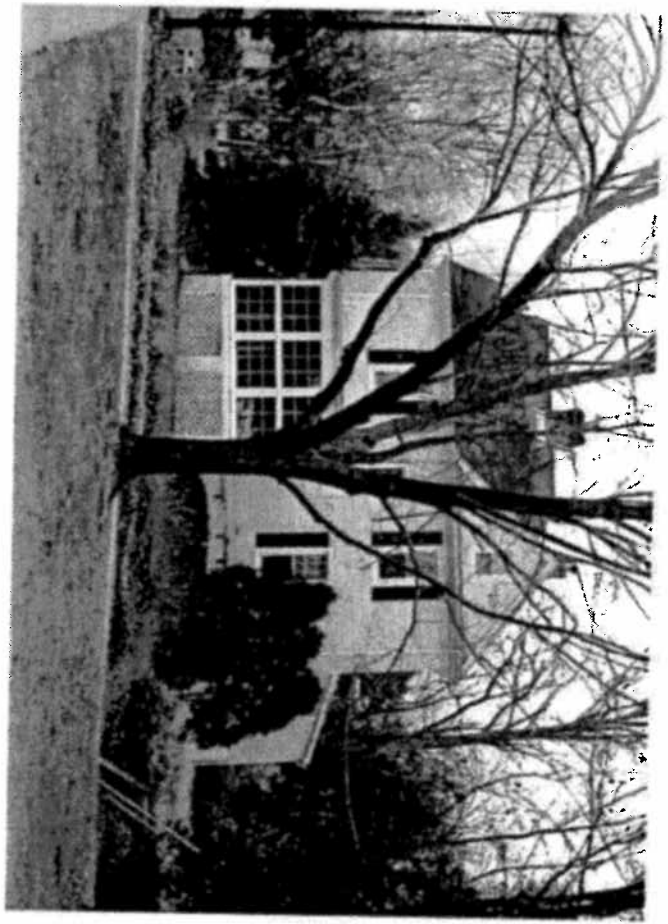
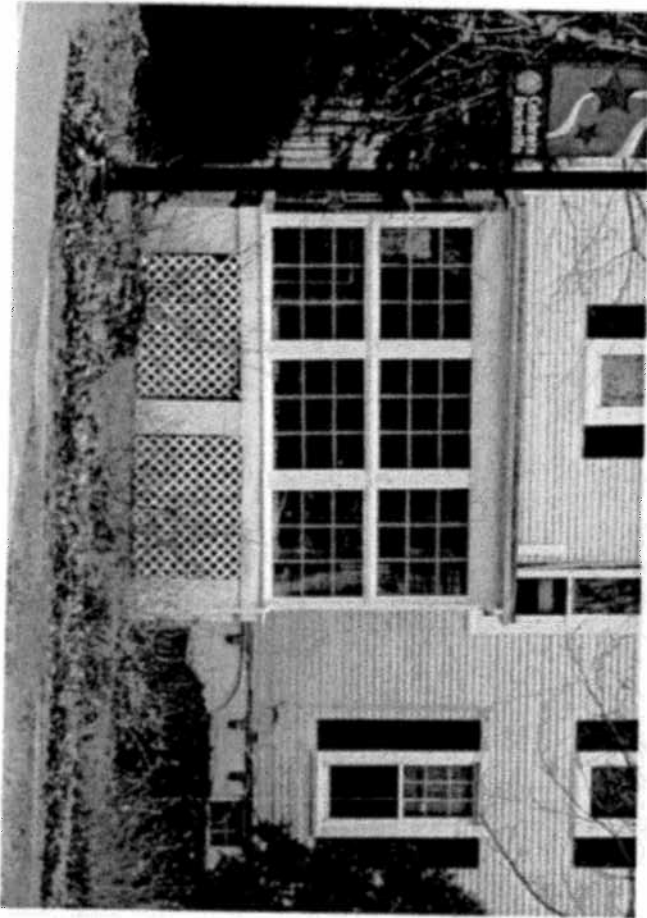
These efforts, using paper and scissors, provide a notion of what the side might look like if we removed and rotated the windows from horizontal to vertical. The reflections in the glass distort the appearance. The sliders would have to be replaced; only four of the six windows might be re-used in this manner. The side is not a perfect square, but close enough that such a solution can be contemplated. It would be a lot of work.
Tom

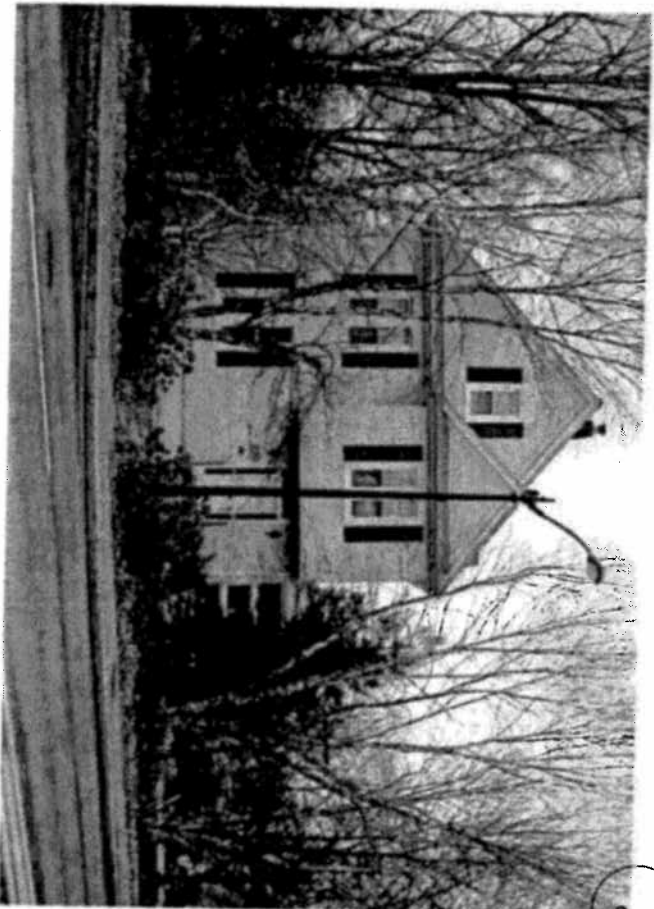
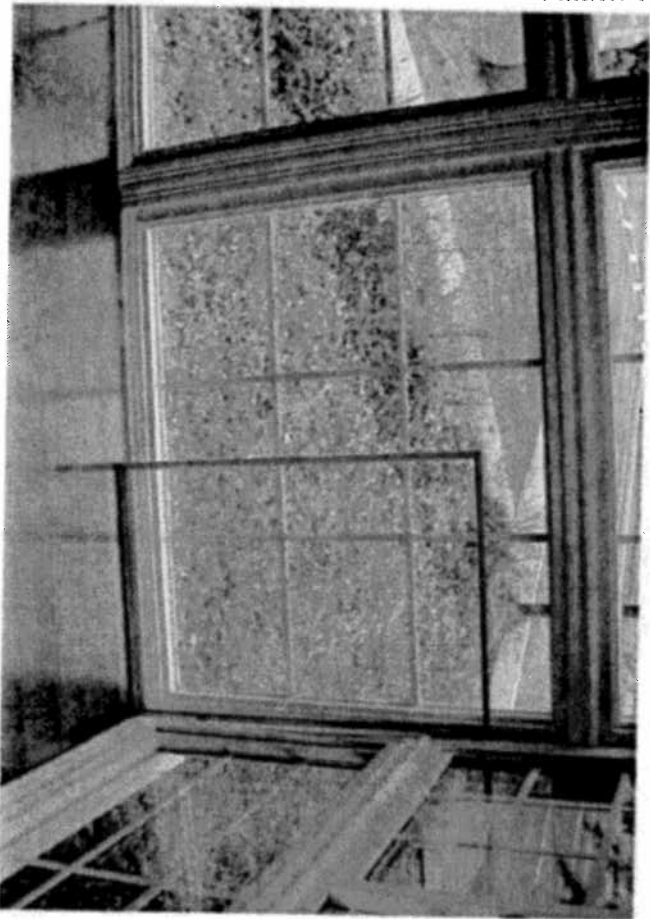


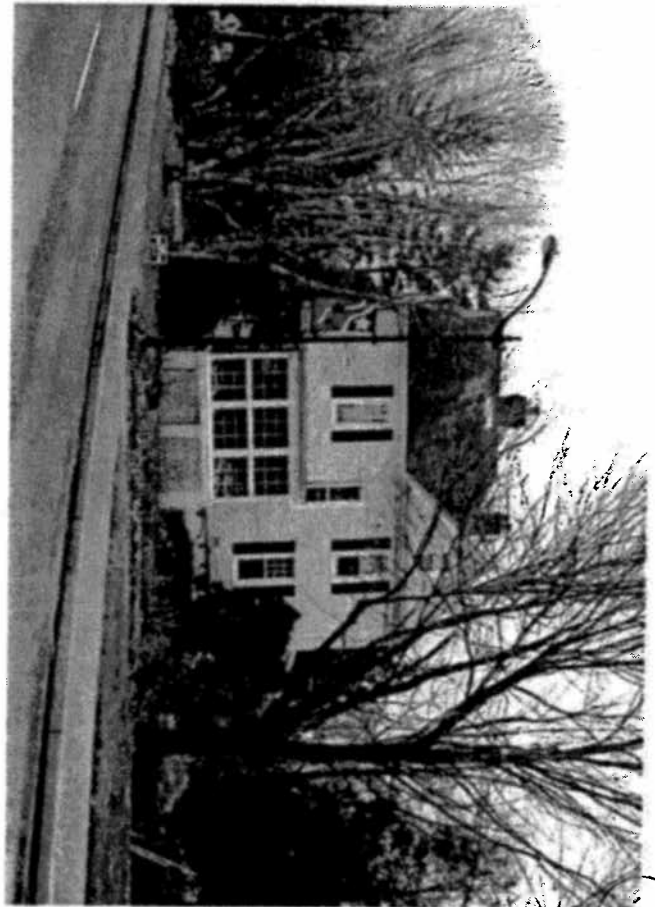
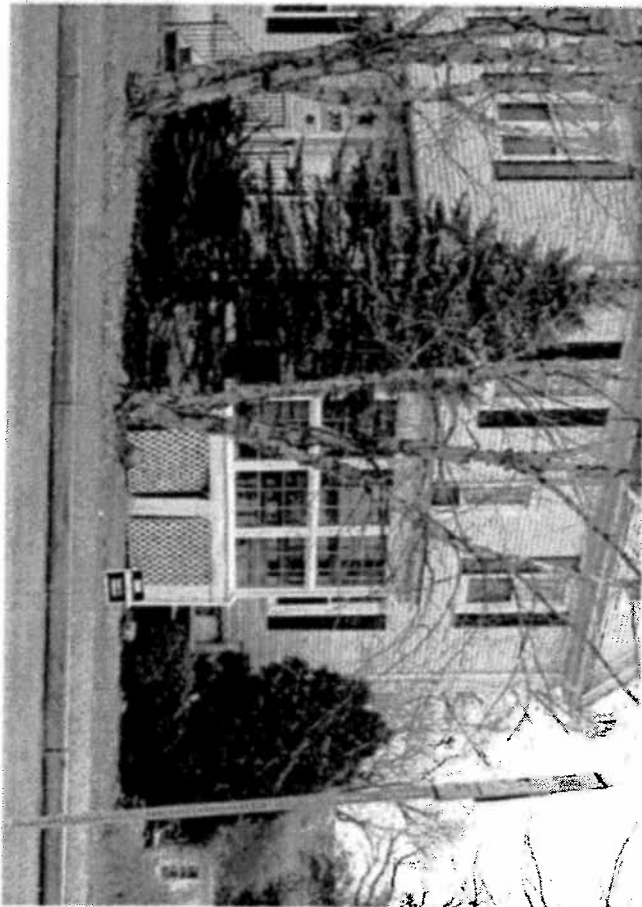
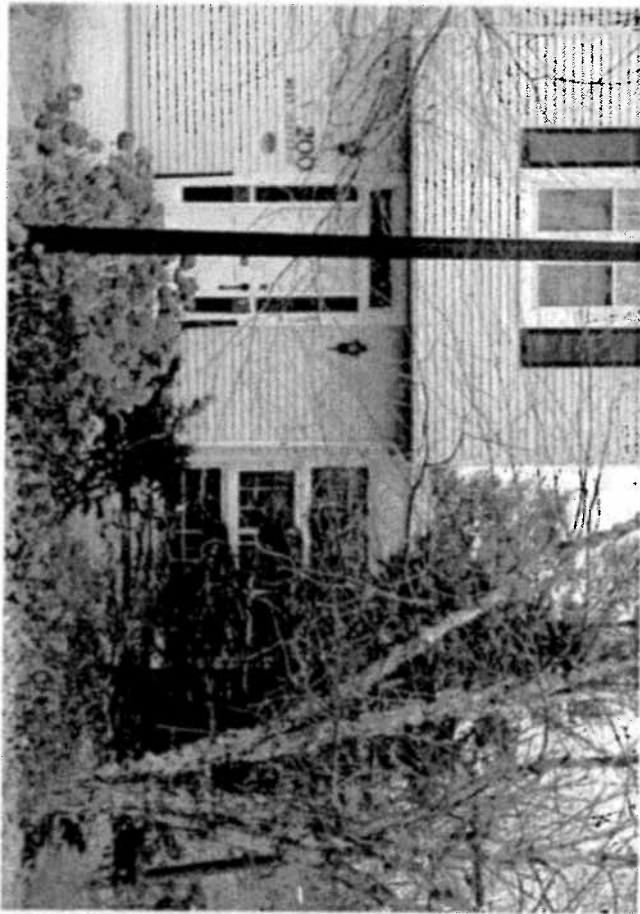


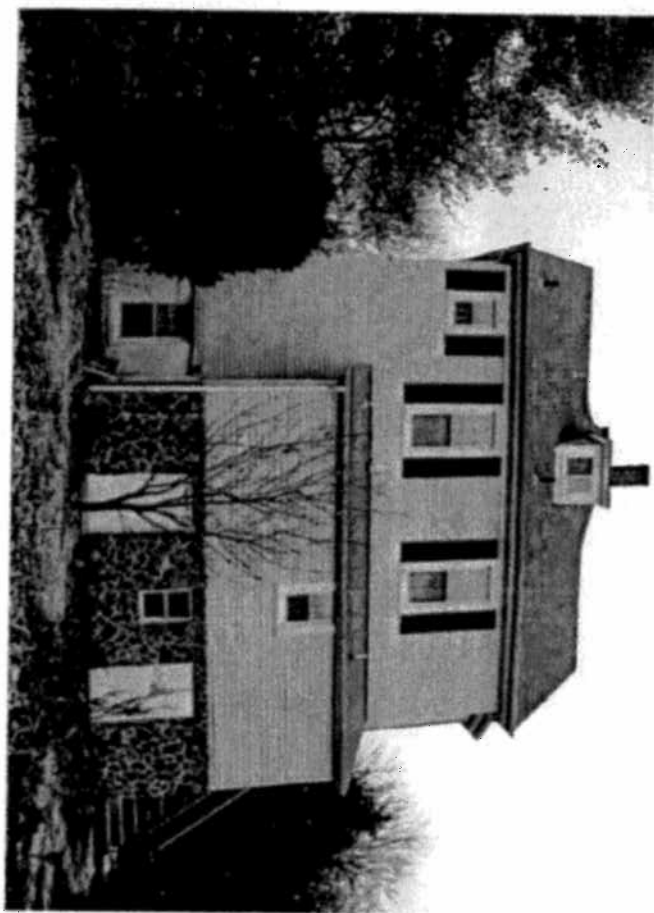
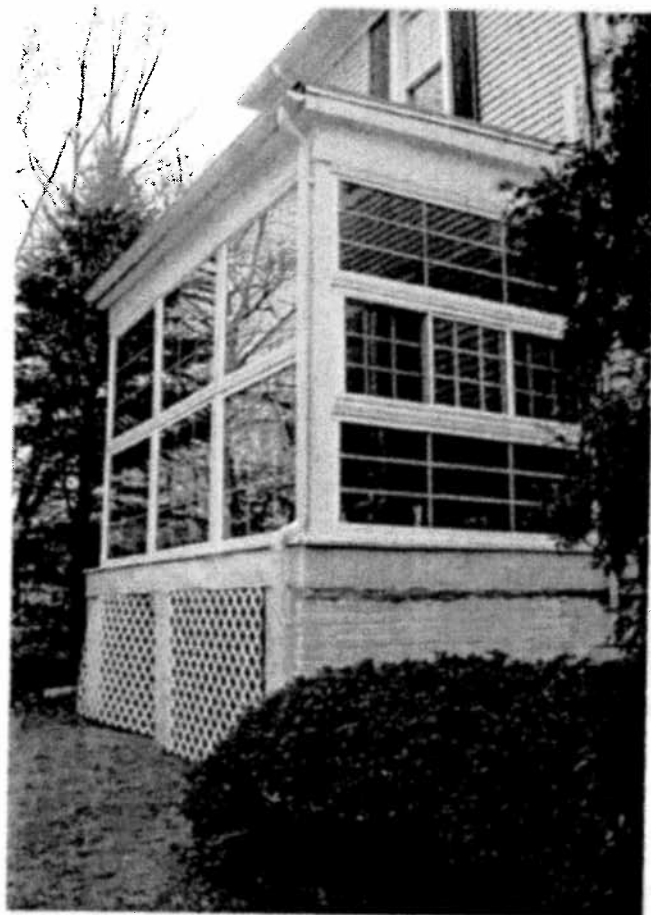














HDC2013-00608
Regina McAndrew

to:

historicdistrict

12/28/2012 08:50 PM

Hide Details

From: Regina McAndrew <gigimcandrew@gmail.com>

To: historicdistrict@rockvillemd.gov

First, let me state that the property I will address is at the corner of W. Jefferson and S. Van Buren Street. It was my understanding that this yellow, siding clad home changed the address from W. Jefferson to S. Van Buren Street. If I have incorrectly identified the property, my comments are general and apply to past and future HDC actions. I must protest retroactive approval of "improvement" or building projects in the West End Historic District. A number of years ago (20 ?) a former owner installed new vinyl windows that required spacers and do not compliment a period property. This yellow, siding clad house was not improved by these windows that do not match any suggested style in the HDC / City publications. The property at 216 W. Montgomery Avenue is the most egregious approval of a property that applied as a Georgian style house and whose finished style was "big box" brick. Where was the HDC person assigned to oversight during the building process. Maintaining an HDC staff and commission should allow citizens a high expectation of enforcement for major, highly visible projects. I support application to HDC for any major, visible projects that yield a permanent product. Where to plant the bushes does not concern me. In conclusion, if anyone who neglects to file for HDC approval and is then given retroactive approval, what purpose does the HDC serve?

Sincerely, Regina McAndrew
208 W. Montgomery Avenue
Rockville, MD 20850

45 PRESERVATION BRIEFS

Preserving Historic Wood Porches

Aleca Sullivan and John Leeke



National Park Service
U.S. Department of the Interior
Heritage Preservation Services



Few architectural features evoke more romantic notions or do more to define a building's historic character than the American porch. The size, style, detailing, and location of a porch can tell volumes about the age and use of a building. Each component, from handrail or baluster to column or post, enhances the architectural character of the porch. Alter or remove the porch and a historic building or streetscape can lose its visual integrity and historic authenticity (Fig 1).

Functionally, a porch protects an entrance from the weather. Yet open porches are constantly exposed to sun, snow, rain, and foot traffic, and thus subject to deterioration, perhaps more than other parts of a building. Wood porches are particularly vulnerable.

Deferred maintenance and neglect account for the decay and loss of countless numbers of historic porches

each year. Deterioration from moisture and resultant wood rot, and damage caused by wood-eating insects are common problems that, when left unaddressed too long, can lead to the loss of significant historic fabric. Inappropriate repairs or insensitive alterations, such as the enclosure of a front porch, can be equally destructive and negatively affect the porch's appearance. All these things can alter a building's historic character. To preserve the character of the porch, as well as the historic building itself, it is essential to plan carefully before undertaking any work on a historic porch.

This Preservation Brief provides guidance for the everyday care of wood porches on older buildings. It focuses primarily on the maintenance and repair of wood porches, but acknowledges other, often challenging, work as well. This publication provides a brief history of the American porch and identifies its basic structural and decorative elements. It outlines how to assess the condition of a wood porch, how much work may be needed, and how to develop a specific scope of work. Detailed guidance on each level of work is provided, beginning with routine maintenance, followed by general repairs for various porch components, and concluding with replacement of parts that are beyond repair. Recommendations are provided for work that may require professional assistance. Although the Brief primarily addresses residential buildings, much of the information can be applied to wood porches on any structure.

Evolution of the Porch

In colonial America, buildings in the northern colonies tended to echo British precedents with small gable-roofed extensions to protect main entrances. Whether open or enclosed, these extensions were called porches (from



Figure 1. Distinctive yet different, these front porches are important features along the street. The rhythm would be diminished if the front porch from one of the houses was dramatically altered or removed. Photo: Aleca Sullivan.



Figure 2. Porches not only help define the architectural character of a building but also serve as living areas. They can be designed to take advantage of surrounding views. Cedar Grove, the home of the nineteenth-century landscape painter Thomas Cole, has an L-shaped veranda on the front and a two-story porch on the rear, providing an enviable view of the Catskill Mountains. Photo: Marilyn Kuplan.

Medieval English and the French word *porche*, which stems from the Latin, *porticus*). Also known as *portico* when supported by columns, these covered entrances were sometimes designed to respect classical order and details, especially on more stylish buildings. Hooded doors or small covered entryways flanked by benches, often called *stoops* (from the Dutch *stoep* for step) that served as short covered transitions to and from the outdoors were common features, especially in New York and the mid-Atlantic colonies.

During the late 1700s and early 1800s as longer shed-roofed porches became more common, they were typically called *piazas*, as they were then called in England. This term, still popular in some areas of North America, is adapted from the Italian word for open space or plaza. An alternate term for a long open porch, *veranda*, reflects British colonial design influence from the Indian sub-continent.

In French colonial areas, such as the Louisiana Territory, houses were often built with broad roofs extending well beyond the exterior walls to form surrounding porches, known as *galleries*. Porches were also important features of Spanish colonial buildings. In California, for example, many adobe ranches featured a *portal* with the roof supported by wooden posts. African and Caribbean influences can also be found in North American porch traditions.

By the late eighteenth and early nineteenth centuries, porches became more common in larger, wealthier areas such as Philadelphia, Boston and Charleston. In both the North and the South, formal colonnades with tall columns dressed in classical orders were sometimes added to help dignify public buildings, hotels, and mansions. This trend continued through the 1830s and 1840s, as the Greek Revival became the dominant architectural style in many areas of North America.

The social role of porches as a transition space between indoors and outdoors and as a link between private and public realms evolved during the 1800s. By offering grand entrances and sheltered landings with views of the surroundings, prominent porches became expected features of inns, hotels and resort spas, where they could serve as promenades, social gathering spots, and refuges for more private retreats. Porches were also added to private homes to serve many of these same functions (Fig 2). As the country began to thrive and expand, porches became more than just covered entrances or ceremonial features; they became an integral part of domestic social life.

Some of the most significant factors that aided this shift were America's industrialization and later suburbanization. As improvements to mass production methods helped spur industrial growth, many Americans had more money to spend and more leisure time. Meanwhile a growing middle class was moving to new suburban neighborhoods. Inspired by the pattern books of Andrew Downing and George Woodward and the published designs of such architects as Alexander Jackson Davis and Calvert Vaux, the homes of these mid-1800s suburban neighborhoods were typically ornamented by elaborate porches dressed with fancy millwork. By this time, millwork catalogues and builders' pattern books offered a wide variety of designs for porch parts. With mass production, these fancy brackets and other ornamentation became less expensive, making it easier and more affordable to construct decorative porches (Fig 3). With mechanized wood turning lathes, the cost of posts, balusters and decorative spindle work also decreased to a level affordable by many. Adding a porch with wood ornamentation could enhance even the smallest and simplest of houses. Even older homes could be modernized with a fancy porch addition, stylized to the latest fashion trends. Such changes culminated in the large, highly decorated wrap-around porches of the Queen Anne style.

The second half of the nineteenth century was the golden era of porches. The social role of the porch increased as it evolved into an outdoor parlor, a true extension of the house into the landscape. Often partially screened by shrubs, porches could provide occupants with discreet opportunities for social contacts that might otherwise be difficult to achieve in an age obsessed with manners and proprieties. For many, sitting on the porch became an important part of their daily routine. Perhaps President Rutherford B. Hayes best summed up the love that Victorian-era Americans felt towards their porches when he recorded in his journal in 1873: "The best part of the present house is the veranda. But I would enlarge it. I want a veranda with a house attached."

By the early twentieth century, the hygiene movement, which stressed that access to fresh air could help prevent or remedy such diseases as tuberculosis, contributed to the development and proliferation of the sleeping porch.

These porches were usually located on the second floor next to bedrooms. This era also saw the rise in use of insect screening on porches to guard against the discomfort of mosquitoes and the diseases they spread, such as yellow fever and malaria.

While innovations fostered the proliferation of porches in the nineteenth century, new inventions helped lead to its decline in the twentieth. As the automobile boom of the early twentieth century made it easier for people to get out of the house for entertainment and relaxation, porches began to lose popularity, especially as architectural styles and social attitudes changed. With the telephone, neighbors and friends could chat without personally meeting. And housing styles popularized in the construction boom after World War II often omitted front porches all together as backyard patios became the focus of private outdoor activities. Finally in the mid-twentieth century the broad availability of air conditioning and television enticed many people to stay inside at night and brought the golden era of the American porch to an end.

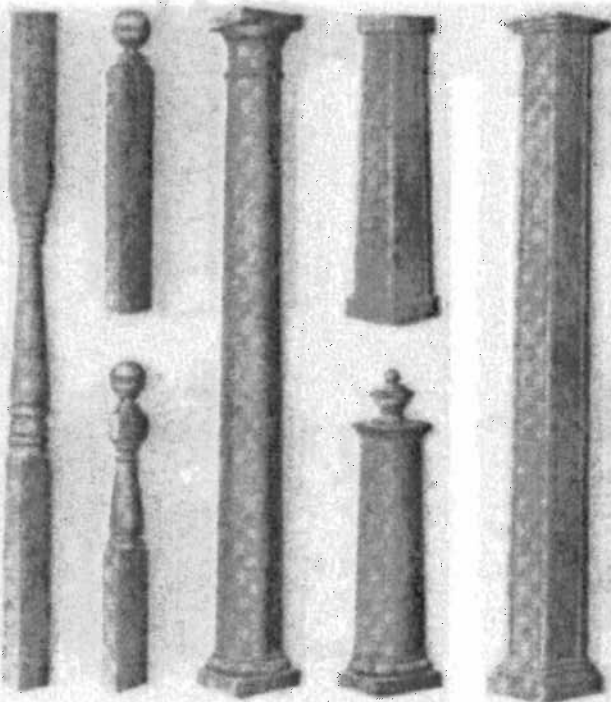


Figure 3. Throughout the late nineteenth and early twentieth centuries, millwork catalogues offered a wide variety of designs for porch parts, including columns, newels, balusters, spindles and brackets. As exhibited in the Cedar Rapids Sash & Door Company's *Standard Design Book*, stock parts made embellishments to porches affordable both for new construction and "updating" existing homes. Courtesy of Charles Fisher.

Understanding the History and Significance of a Porch

In preserving historic buildings, it is important to understand the history and evolution of a particular structure and what features contribute to its historic character. This is especially applicable when working with historic porches since they usually are prominent features, significant to the character of a building.

Answers to the following questions will help establish the significance of a porch.

What has the porch looked like in the past?

Early photographs, insurance maps, or tax records can provide useful information. These may be found at city or county offices, historical societies, libraries or even from former owners or neighbors. Such documents may indicate the footprint of the building or show long-lost details of the building's appearance. Physical evidence of historic porch footings may exist. Paint shadows of a former roofline or moldings can provide clues about details now missing. Old porch parts may have been "stored" under the deck during past repairs.

What, if any, changes have taken place to the historic porch over the years? On many porches elements such as columns, balusters, and finish details correspond with the design and detailing on the rest of the house. With other porches, the style of these features may differ from the rest of the building, but may reflect an important chapter in its history. Sometimes, parts of porches may have been lost due to neglect or remodeling. Questions about what historic fabric remains, what has been altered over time, and whether earlier changes are now an integral part of the historic character should be resolved before planning major porch work. Determining the historical evolution of the house may require both physical and archival research and in some cases the professional eye of an architectural historian.

What are the character defining features of the porch?

The open qualities are one of the key features of most historic porches. Overall size, shape and design are obviously important components as well. There are numerous other contributing features which may exist, including the shape of the porch roof, the way a large porch is divided into distinct bays as with columns, the nature of the supporting foundation, the style and size of columns and balustrade, and whether the porch is raised or largely at grade. The simplicity of a porch or its richness in detail will also help define it. Materials are usually important as well, not just the wood features, but also whether other materials exist such as masonry columns and steps (Fig 4).

How does the porch contribute to the building's overall appearance? The size and location of a porch and how much of the historic features survive will help define its significance. A highly ornate porch across much of the front facade may be the most distinctive

The Anatomy of a Porch

- a - Pier, penetrates ground, supports floor structural system and columns
- b - Fascia covering floor framing
- c - Floor (or deck)
- d - Bed Molding covering joint between fascia and floor
- e - Column supporting entablature above

Entablature (f, g, h)

- f - Architrave of entablature
- g - Frieze of entablature
- h - Cornice of entablature

Roof Railing (i, j, k, l)

- i - Newel (or Pedestal) of roof railing
- j - Balusters of balustrade
- k - Top rail of balustrade
- l - Bottom rail of balustrade

Balustrade around floor (m, n, o)

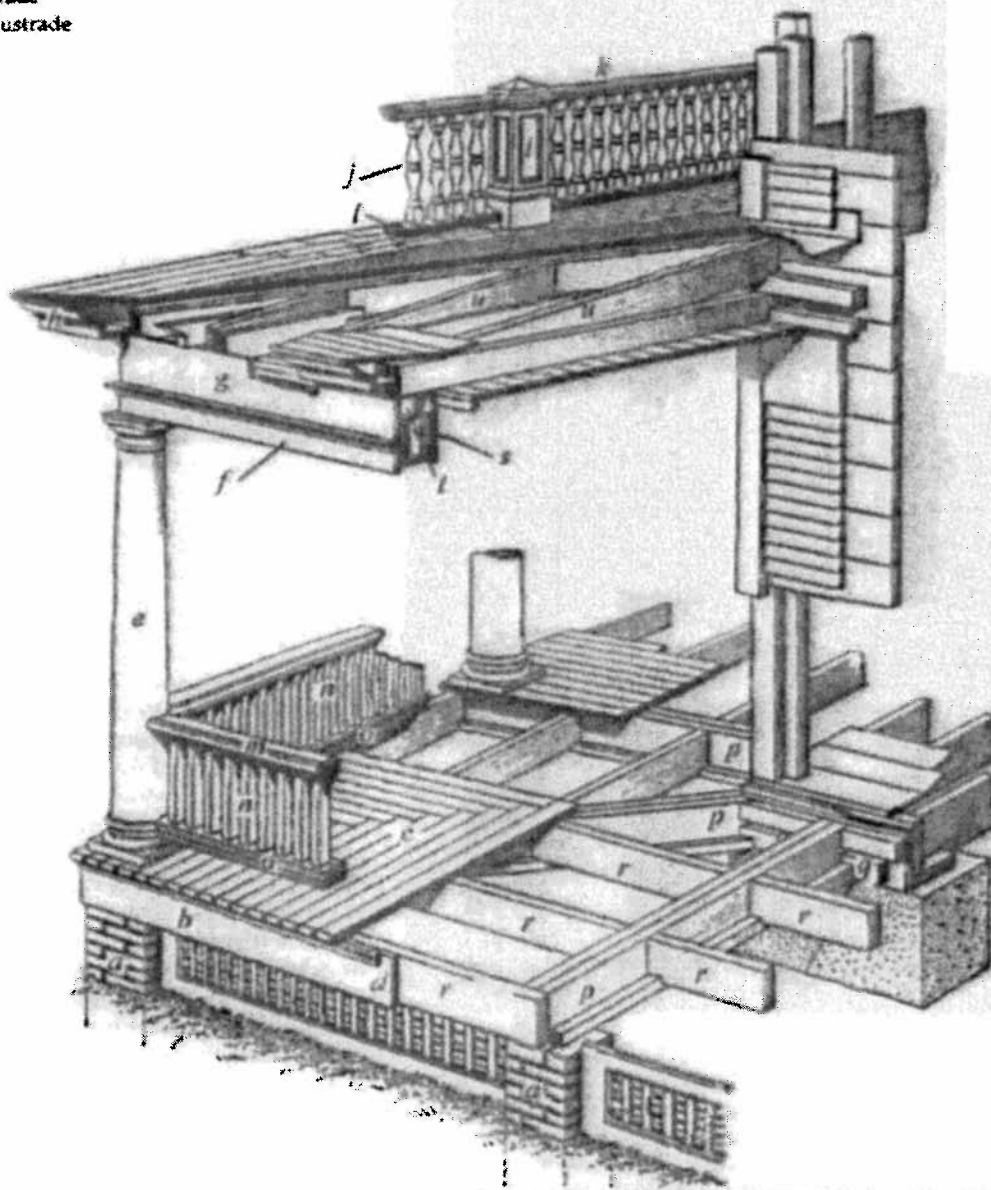
- m - Top rail of balustrade
- n - Balusters of balustrade
- o - Bottom rail of balustrade

Structural system of deck (p, q, r)

- p - Girder rests on piers and ledgers, support joists
- q - Ledger fastened to house sill, supports girder
- r - Joist fastened to girder, supports floor

Roof Structural System (s, t, u)

- s - Beams inside the entablature span from column to column, support plate
- t - Plate of the entablature rests on beams, supports roof rafters and ceiling beams
- u - Rafter of the roof structural system



Drawing courtesy of Thomson Education Direct.

feature of the entire house, while a small simple porch on an otherwise plain cottage may be equally significant. The architectural style of a porch may relate to the building and may help define its character. Sometimes a later style porch may have been added to a building or may have replaced an earlier porch. In such cases, the later porch may have acquired importance in its own right. On the other hand, a later porch may be of such poor quality that it detracts from the building's historic character. Because porches are so diverse in terms of style, size, shape and detail, their significance should be assessed on a case-by-case basis with an understanding of the overall importance and evolution of the building.

Assessing the Condition

Before undertaking most repairs, it is important to assess the condition of the porch. The assessment is greatly facilitated if the porch has been regularly maintained and a record of past work is available. In most cases, however, a condition survey must rely almost exclusively on the physical examination of the porch, documenting the findings with notes, photographs or sketches.

Many older porches were constructed using good construction practices and materials. As a result, porches that are over 100 years old are not uncommon. Most porch deterioration can be attributed to the lack of proper maintenance. Important questions to address in assessing the condition of the porch include the following:

How is the porch constructed? A porch is rarely an independent, unattached structure. It may, however, have its own foundation, attached to the house only along the deck and the roof. Alternatively, it may be an included or engaged porch that is integrated with the actual structure of the house. The relationship between the porch and the house is important. If the outer support posts are decayed or if foundation piers are sinking, the roof structure may be pulling away from the house. Many porch decks are fastened to the main building on a ledger, a horizontal board along the house's foundation. A decaying ledger may compromise the structural integrity of the porch and can represent a major safety issue.

Are the foundation and structural members of the deck sound and providing adequate support for the deck, posts and roof above? The porch structure needs to be sound at every level. Therefore, a visual inspection of the underside of the porch is necessary to determine its condition. Major cracks in structural members, failed joints, significant wood rot, or evidence of widespread insect infestations (termites, carpenter ants or powder post beetles, for example) are usually signs of serious structural damage. Such conditions may require consultation with a professional architect,



Figure 4. Celebrating the 4th of July in 1912, this gathering of family and friends reflects the popularity of the porch as a social gathering place. While not overly ornate, each detail of the porch from the roof balustrade to the turned columns to the simple lattice work facing the deck contributes to its character, creating in effect the dominant architectural feature of the building. Photo © Utah State Historical Society

engineer or building contractor familiar with old buildings. For an adequate assessment, it may be necessary to remove facing boards to check for potential decay in the structural sill behind (Fig 5).

What is the condition of the porch? Porch foundations may be a continuous wall of masonry, a series of masonry or wood piers or metal pipes, or a combination of these. Missing sections of the foundation, crumbling masonry mortar joints, or areas where the sill or joists no longer fully rests on the foundation may represent serious deficiencies. What appear to be deep foundation footings may only be stones or cement blocks sitting on top of the ground. The footings must be stable enough to adequately support the porch in its current or intended use. The smell of mold or appearance of fungal growth on wood beneath the porch is an indication of deficient air circulation and that conditions exist for wood decay. Recent changes that can contribute to deterioration should be identified for correction, such as a clothes dryer vent dumping warm moist air underneath the deck. The enclosure of original air vents in crawl spaces or the boarding up of latticework between piers are other changes that will usually promote an unwanted moist environment.

Are the porch posts providing adequate support? Posts, pillars or columns usually help support the porch roof or an upper deck. Establishing what the posts



Figure 5. Even historic porches that appear to be in total disrepair may be repairable. While the roof needed replacement, much of this porch was repaired, including such features as the decorative columns, ornamental brackets, and balustrade. Photos: John Locke.

are made of and how they are constructed will aid in understanding how they function and may deteriorate over time (Fig.6). Although the posts on a wood porch are commonly made of wood, they may be of masonry or metal or a combination of materials. Large round columns usually are made of wood staves similar to the way barrels are constructed; smaller diameter columns may be solid. A sag in the deck below or a faltering foundation can impact the supporting role of a column or post above. Wood columns and posts are prone to water seeping into open joints, particularly in the base and the lower end of the shaft. It is not uncommon to find that older columns have had patches and replacement bases.

Is the roofing and drainage system keeping the water away from the porch? Porches were designed to shed water. This means water will move away both from the building and the porch and not pond and saturate the wood. Continuously high moisture levels promote fungal growth that eventually causes wood to decay. Peeling paint on ceiling boards in a specific location is a sign of a possible roof leak. Clogged or missing downspouts and gutters can cause erosion at the foundation and can contribute to reverse-grade draining that is directing water under the porch instead of into the yard. Inadequately sloped porch floors can result in improper drainage and promote deterioration as exhibited, for example, by cupping floorboards.

What is the flooring condition? The porch component most subject to decay is the flooring. Often decay starts at the exposed ends of the boards or where cracks, checks or open joints have occurred and are exposed to the weather. Flooring should be checked frequently for peeling paint, rotted wood, and for loose, cupping or splintery boards. Where water is ponding, there is insufficient slope away from the building, a condition that should be corrected. Floor deterioration can also start in unlikely places such as the result of frequent hose washing to remove dirt or the placement of plant stands directly on the floor without proper moisture barriers. Firewood stored on a porch may trap moisture on the floor and harbor active insect infestation that can be ruinous to a wood porch. Thick floor mats and carpeting also may trap moisture, leading to premature decay.

Is there evidence of general wood decay?

Wood deterioration may take different forms such as fungal decay, insect infestation or even sunlight degradation of exposed unfinished wood. Decay may be present where two wood surfaces meet and are not adequately protected from water, such as along open joints or behind moldings. Dark streaks, discoloration, and widespread peeling paint on a finished ceiling suggest excessive moisture or water leakage. It may be necessary to remove several finished boards to properly identify the cause of the problem and to insure damage has not extended to structural members behind. Trails of carpenter ants are another sign of potential decay since they will infest moist decaying wood. Where inadequate painting has left wood exposed for a long time, damage to the wood surface from light itself will occur, typically indicated by wood discoloration. Without sanding or scraping back to a sound wood surface, repainting will result in premature failure of the paint film.

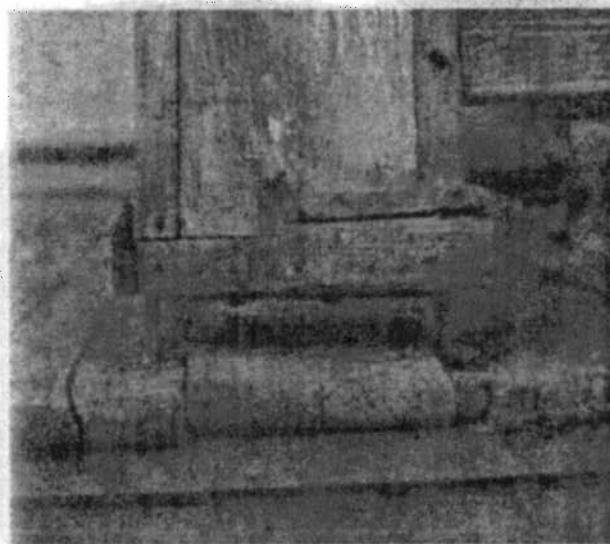


Figure 6. A traditional way to extend the life of porch posts was to place posts on metal feet, thereby providing a separation between the wood post and wood deck. This helped to prevent the wood post from rotting at the base. Early post feet were simple iron bars bent into a stirrup shape. By the late nineteenth century manufactured cast-iron feet were common, consisting of a pair of disks separated by a short pipe. Post feet are still available today. Courtesy of Old-House Journalist Brian McNeil.

Are there open cracks or joints in the woodwork?

Tightly sealed connections keep water out. Where individual boards come together, cracks in woodwork and joints can eventually become a major problem (Fig. 7). Cracks are primarily caused by movement and water penetration. Movement of structural members beneath the finished woodwork can shift the position of individual boards and trim, breaking open the thin coating of paint over joints. This condition is common on porches with shallow foundations that are subject either to annual winter frost heaving or where soil conditions undergo major seasonal changes in moisture content. Changes in the moisture content of the wood itself due to repeated wetting and drying or changes in seasonal humidity can also cause noticeable expansion and shrinkage across the width of a board. This provides opportunities for water to penetrate unprotected areas.

Does peeling paint indicate deeper problems?

An unbroken layer of paint covering all wood surfaces is the first line of defense against moisture causing decay. Over time, even hairline paint cracks can allow water to penetrate, causing paint to peel down to bare wood. Such peeling occurs near breaks in the film, at opened joints, or where the paint has been scratched or scraped. Peeling can also occur over large areas where there is high moisture and insufficient ventilation. Areas of particular concern include the crawl space beneath the porch deck, inside columns that lack ventilation, and in a roof structure that has a finished ceiling and lacks ventilation. If heavy paint build-up exists on columns, floors and trim, moisture can be trapped within the wood, resulting in the loss of paint adhesions and eventual wood decay.

Are trees, shrubbery and flowerbeds threatening the porch? Shade trees can make the porch a cool oasis, but the branches of a nearby tree rubbing on the roof, gutters or wood trim often will cause damage. Tree roots may destabilize porch foundations or supports. Bushes growing against the porch and not trimmed back on a regular basis may block wood porch components from drying breezes, thereby letting moisture build up in the woodwork. Flowerbeds and mulch around the porch that are not properly sloped downward in a grade away from the house will promote moisture problems.

Defining the Scope of Work

Once the historical and physical assessments are complete, it is important to define the scope of work. How much and what kind of work will need to be done to make the porch structurally sound while preserving its historic character, or to recover its historic appearance if portions are extensively deteriorated, altered or missing? Any part of the porch that defines its historic character should be repaired or replaced to match. Since the porch may display varied levels of deterioration, the spectrum of work in one project

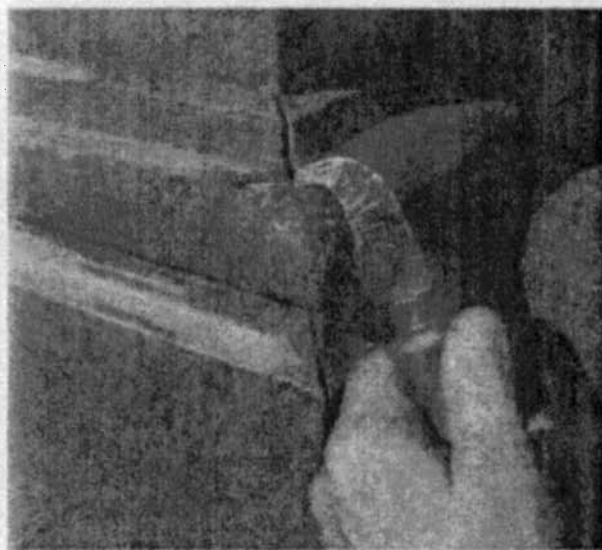


Figure 7. Common problems with porches that can contribute to serious wood decay include cracks in woodwork and joints that have opened up. Both provide an easy path for water seepage. Trapped moisture can foster peeling paint, wood decay and insect infestation. Open joints and cracks should be checked for evidence of more serious decay and marked for caulking or repair. Photo: John Locke.

can include maintenance, repair, and replacement. When laying out the scope of work for the project, each individual component and decorative element of the porch should be identified, and linked with the work needed for that item.

Undertaking the Work

The highlighted work approaches in this section are based on *The Secretary of the Interior's Standards for the Treatment of Historic Properties* and the *Accompanying Guidelines for Rehabilitating Historic Buildings*. The *Standards and Guidelines* provide a sound philosophical and practical framework for achieving the highest retention of historic materials and character possible. Thus, the familiar hierarchy is applied: maintain, repair, and then replace only if necessary. Contemporary alterations are discussed in a separate section.

Preservation and Maintenance

There are a variety of tasks that can be done on a regular basis to extend the life of a porch. In addition, a visual inspection of the porch should be made every spring and fall to determine if more in-depth repairs are necessary. Fortunately, ongoing maintenance significantly reduces both the need and cost for later repair work and represents good preservation practice. When properly maintained, a well-constructed porch can last for decades.

Routine Cleaning and Other Surface Work

Since many porches are essentially another living space,

extending housekeeping to this space makes practical sense. Regular maintenance includes sweeping the wood porch decking, and, if needed, an occasional damp mopping. Removing dirt and leaves by sweeping is preferable to frequent hosing off the deck with water. The latter can saturate the woodwork, thereby promoting decay. Frequent sweeping will reduce the accumulation of abrasive materials, such as dirt and sand. While visually pleasing to some, vines and plants should be kept trimmed away and not be trained to grow onto or allowed to grow beneath porches. Plants and vines unfortunately reduce ventilation, promote a moist environment for insects and decay, accelerate open wood joints and impede cyclical maintenance. As an alternative, traditional freestanding trellises can be used to support plant growth away from the porch.

There are certain precautions that are recommended for wood floors. Rubber mats, rugs or indoor/outdoor carpeting can trap moisture and condensation on their underneath side and should not be used on a wooden porch floor. Keeping flower pots up off the wooden deck will help prevent moisture buildup and decayed spots – wood, clay or metal “trivets” that hold the pots an inch or more off the wooden deck are helpful, but the pots should be moved to different locations periodically. In colder climates, light snow can be swept off the porch. Snow shovels with a hard rubber leading edge or plastic shovels cause less damage to wood than metal, while paint in good condition helps ice to release more easily. Sand or clean kitty litter can be sprinkled on ice to prevent slipping; however, they should be later swept off the porch, as they are abrasive. Salt (sodium

chloride) is not recommended for ice removal on older porches as it can promote corrosion and failure of nails and other fasteners. Magnesium chloride is an alternate de-icing salt that is less corrosive and less damaging to masonry and plants. If any de-icing salt is used, be sure to scrub and rinse off the porch deck in the spring. Boot scrapers and brush-mats at the bottom of the stairs are recommended for muddy areas.

Painting

Spot painting and resealing of open joints should be undertaken at least every other year (Fig. 8). Heavily used stair treads may require more frequent paint touchup. When peeling paint or bare wood is evident, inspect to ensure it is not signaling deeper problems, such as decay. With sound wood, scrape off the loose paint, sand, prime, and repaint the area. Where lead paint is present, appropriate lead hazard precautions and procedures apply. Only top-quality exterior primers and paints are recommended, selecting for the deck and stairs specially formulated paints. Where wood porch steps are exposed to moisture, grit added to the wet paint during application will help improve safety.

Repair

Many repairs may be successfully undertaken by property owners, while major projects often require the special knowledge and equipment of an experienced contractor. Repairs generally include patching and reinforcement of historic materials. The roof and foundation are particularly important to the preservation and the structure of a historic porch yet they often receive much less attention than ornamental features. Their neglect will usually lead to more costly work. Repairs to features such as a balustrade or flooring can encompass limited replacement in kind when the porch part is severely deteriorated or when a part of a repeated feature is missing altogether. Some common porch repairs are discussed in this section.

Filling Open Cracks or Joints

To seal open cracks or joints, start by scraping off the paint back a few inches from the opening and removing old caulk to expose bare wood. The opening should be examined for any signs of wood decay, and to determine if the joint is loose due to a loss of connection, such as rusted nails. After correcting any problems, apply a water-repellant wood preservative that can be painted. Such preservatives are either an oil-based or waterborne solution of oils or waxes with mildewcide, fungicide and pesticide added. Then apply a high quality exterior wood primer to the wood surfaces where a sealant or caulk is to be used. Most open cracks or joints then can be filled with a sealant or caulk, while larger ones may need the addition of a backer rod. In some cases, small metal flashing over the crack or open joint may be more effective and longer lasting but, when used, care should be taken with proper installation. The final step is painting.

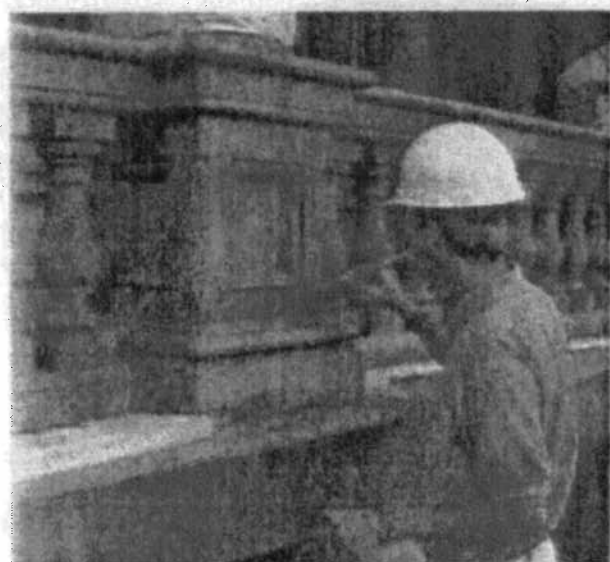


Figure 8. Decay can start when wood is left exposed to the weather or where joints open up. An inexpensive way to extend the life of the existing porch paint without jeopardizing the historic material is spot paint and caulk where needed every year or two. This cost-effective procedure is particularly effective in maintaining wood porches where the exposure to weathering is high. Photo: John Lirke.

Patching with a Dutchman Repair

This traditional technique is often used to repair localized cases of decayed wood and, when undertaken with skill and care, will serve as a permanent repair (Fig. 9). If the damaged area has a structural function, temporary bracing or other support will be necessary. Otherwise the first step after removing any paint around the damaged area is to chisel or mechanically remove the decayed wood. It is best to use the same type of wood being replaced and the new or recycled wood should be seasoned to avoid shrinkage. The repair procedure involves cutting a piece of wood, called a *dutchman*, slightly larger than the area of damage that has been cut out. The *dutchman* then is laid over the damaged area and an outline scribed into the original wood surface below. Next, a chisel or router is used to follow the scribed line to form an opening in the existing wood for the new piece.

As a preventive measure, an appropriate fungicide should be applied to the surrounding old wood and allowed to dry. The *dutchman* is then glued into place with waterproof adhesive, such as an epoxy formulated for wood. The repair is finished by trimming or sanding the surface of the new wood down flush with the surrounding existing surfaces, priming and painting.

Patching with Epoxy or Wood Fillers

There are a variety of commercial wood fillers. Cellulose based fillers consist of wood fiber and a binder and have been available in stores for many years. Only those suitable for exterior applications should be used and they will require a protective finish. Epoxies are a more contemporary product, commonly used by experienced contractors and woodworkers. Epoxies are petroleum-based resins created by mixing two components in accurate proportions that result in a chemical reaction. The result is durable, moisture-resistant consolidants and fillers that bonds tenaciously with wood, and can be sawn, nailed or sanded. Epoxies are for use only in areas that will be painted, as they do not take stain and deteriorate under sunlight. Since epoxies are more difficult to work with than other wood fillers, experience working with epoxies is needed for successful repairs.

Repairing Railings and Balustrades

Balustrades and railings are not only practical and safety features, they typically are highly visible decorative elements. Unfortunately, balustrades and balusters are frequently altered, covered, removed or completely replaced even though in most cases they can be repaired in a cost-effective manner. To preserve historic fabric,



Figure 9. The ends of porch roof rafters are often susceptible to moisture decay. When concealed by a soffit or ceiling, rafters can be repaired by adding new sister boards. Where roof rafter ends are exposed, splicing new wood onto the old (*dutchman* repair) and use of epoxy consolidants and fillers both preserve sound historic fabric while retaining the historic appearance.

Photo: Paul Marlowe, Marlowe Restorations.

the repair of old balustrades and railings is always the preferred approach. A broken baluster usually is one in need of repair, not replacement.

Loose railings and balustrades present unsafe conditions and need to be repaired as soon as possible. Start by examining the points of attachment to determine exactly why the railing or balustrade is loose. Common reasons include rusted fasteners, decayed wood, or physical stress that has broken the fasteners or split the wood. Paint and decayed wood must be removed. Where fasteners are broken yet the wood is sound, the balustrade can be re-fastened using hot-dipped galvanized or stainless steel nails or screws, setting the heads of the fasteners below the surface of the wood and using a wood filler to cover and seal. Next repair deteriorated wood by using a *dutchman* or wood-epoxy repair. The repaired joints then can be sealed and painted.

Replacing Missing Balusters

The balusters help comprise a wood balustrade and come in three general styles: simple rectangular shape; flat, pattern-sawn (usually a board with some decorative edge or cutout); and turned. It may be necessary to replace certain balusters that are beyond repair or missing altogether. Some are easy to replace with new matching balusters while others can be more challenging in terms of both design and costs. Finding or affording replacement balusters may take time since they should match the historic baluster as closely as possible. In the meantime, unsafe balustrades can be temporarily stabilized, introducing temporary new material that soon will be replaced.

In replacing individual balusters, simple, rectangular balusters should not be replaced with pattern-sawn or turned ones unless physical or pictorial evidence survives which indicate they previously existed historically on that particular porch. Such an alteration can change the historic appearance of the porch or be incompatible with the character of the building.

Determine the size and shape of the missing balusters either by examining adjacent ones or temporarily removing an existing baluster as a sample. Heavy paint buildup should be removed so that the original dimension can be established. Scrape and clean the joint locations and make repairs to any deteriorated areas. A new baluster is then fabricated to match the original in design and material, either on site or by taking a drawing or sample to a local woodworking shop. The new baluster should be made one-half inch longer than needed on both ends. Measurements are taken from the bottom surface of the top rail to top surface of the bottom rail. Joints on the new baluster can be laid out with a pencil, using a sliding bevel to transfer any angles, and the new baluster trimmed to fit with a handsaw. After test fitting, the ends and any exposed end-grain of the baluster need to be sealed with a high-grade primer or epoxy. Next, apply a paintable water-repellant coating to all exposed wood surfaces, and apply a primer. The baluster can then be fastened in place with hot-dipped galvanized or stainless steel nails, and the nails set. Finally, seal joints and fastener holes and paint the baluster.

Repairing Column Plinths and Bases

Columns not only enrich the historic character of the porch, they provide support for the roof structure above. Because of their detail and complex construction they can be costly to repair or replace, making maintenance and minor repairs important. Column plinths and bases tend to deteriorate because of their exposed location on the outer edge of a porch (Fig. 10). Leaking gutters can result in water draining into the entablature and down into hollow columns, while clogged or capped gutters can allow water to pour down and splash

back onto the column bases. Open joints and limited wood decay can be repaired using methods previously discussed. Column repairs usually are undertaken by an experienced carpenter, since it may involve structural support of the roof above.

Repairing Floorboards and Ceiling Boards

Floors should slope down toward the outer porch edge for proper drainage. If drainage is inadequate, moisture buildup will cause deterioration of the floorboards. Flooring can also deteriorate due to movement in the supporting structure below. If a floorboard is soft or broken, the extent of decayed or split wood can be determined by probing gently with an awl. The existing floorboard can then be removed, cutting the length if needed so that the end will center on the next nearest joist or girder. Once the board has been removed, the structural framing beneath should be examined for deterioration and to ensure it is sound. A new floorboard is then cut to length, and the outer edge shaped to match the adjacent boards. After priming the replacement board, nail it in place and repaint.

If a section of the ceiling is deteriorating, it is likely that there is a roof or gutter problem. To determine the cause of deterioration, inspect the ceiling, gutters and roof, including the internal roof structure. After making necessary repairs, the ceiling boards can be repaired in much the same manner as a deteriorated floorboard.

Repairing the Porch Roof and Gutters

With roof leaks, the entire porch is at risk. Leaks can promote decay in roof rafters, ceiling joists, and columns as well as in areas more easily to detect such as the ceiling and fascia. Inspect the roof covering, gutters and flashing for deterioration and improper performance. They can then be repaired or replaced, as needed, to keep water out of the structure. Avoid having the gutters and downspouts on the main roof drain onto a porch roof.

Repairing the Foundation

Unstable foundation supports can cause serious damage



Figure 10. This nineteenth century porch column is made of wood staves, similar to the way a wood barrel is put together. After replacing the hirus and making dutchman repairs to the apophyge along the base, the column and pedestal are ready to be reinstalled on the porch. Photos: NPS files.

to a historic porch. There are numerous causes and solutions. If the posts supporting the porch deck rest on stones or brick set directly on the ground, there can be seasonal shifts due to the changing moisture content of the soil or freeze/thaw conditions that will require regular attention. Under certain conditions, it may be advisable to extend footings for the posts below the frost line. Where moisture problems exist, improved drainage may be necessary. It is not uncommon to find that masonry joints in the foundation wall or piers have deteriorated as a result of rising damp, where moisture from the soil percolates up through mortar joints. This condition may lead to the eventual breakdown of the mortar and even old brick and soft stone. In such cases, it will be necessary to replace the areas of damaged masonry and repoint the mortar joints.

With wooden posts, insect damage or rot may necessitate corrective measures to strengthen the foundation. Techniques can include one or more of the following: epoxy consolidation; dutchman repair; or the addition of supplemental supports to the foundation posts and joists. In some cases damage may be extensive enough that the only real solution is rebuilding the foundation.

Repairing a Porch Apron

The apron, skirt, or latticework is a highly visible and functional porch feature. An apron keeps animals out from under the porch, while at the same time allowing air to circulate, preventing unwanted moisture buildup. Aprons typically are made up of a wood frame, surrounding either a simple lattice or a repetitive pattern of decorative sawn boards. Because the frame is so close to the ground, decay is common. Other causes of decay include plantings around the house that are growing too close to the latticework and improper water drainage. An apron may require partial or complete disassembly for proper repair. One or more of the apron frames should either be hinged or secured with turn buttons for easy access to under a porch for inspection and maintenance.

Replacement

When individual porch parts are deteriorated beyond the point of repair or missing altogether, replacement is necessary. To retain the historic character of the porch, the replacement parts should match the historic component as closely as possible in material, design, color, texture, and other qualities. To achieve this, existing evidence of the historic design, such as a baluster or column detail, or a tongue and groove floor design, should serve as a pattern for the replacement part. When replacing an element, it may provide a good opportunity to upgrade the wood to another species that is more decay resistant, or to one with a vertical grain that is more resistant to cupping or splintering. In limited cases, it may be appropriate to use a substitute material for the replacement material as long as it conveys a close visual match. Before replacing a deteriorated historic porch component, it is important to understand

how it was constructed and installed, and what led to its deterioration. If the replacement part does not sufficiently match the historic part, the character of the porch may be diminished, or even lost. If the cause of material failure is not addressed, the replacement will also fail.

Replacing Porch Floorboards

If a large section of the porch floorboards is deteriorated, the framing beneath may also be damaged and should be assessed. Replacing floorboards can often expand into repairing the structural sills, girders, and joists beneath. Complete floor replacement will likely require the removal of floorboards that are under structural posts or columns. This may necessitate the careful stabilizing in place or the removal of the posts or columns and the installation of temporary support for the roof structure. If the floor failure was caused by inferior wood, the wood quality can be improved at this time. However, the new wood flooring should match the existing in thickness, width, shape and texture. The slope of the floor should be maintained, or a slope may need to be created if none exists. A slope of ¼ inch per foot or greater, away from the house, is needed for adequate drainage. Boards are usually laid in the direction of the slope, sloping down to the outer edge of the floor.

Replacing Steps

Porch stairs receive heavy usage and are close to the ground, making them predictable candidates for deterioration. Stairs should be repaired or, if necessary, replaced by an experienced carpenter who understands the safety codes and is experienced in fabricating custom stair parts to match original detailing without depending only on store-bought parts.

Replacing Column Plinths and Bases, or Entire Columns

When plinths and bases are deteriorated beyond repair, they can be replaced without replacing the column shaft, which may still be in good condition or require only minor repairs at the bottom. Such replacement will involve temporary shoring for the roof. One-story columns and shafts are often more easily removed during this work, while taller columns are sometimes supported in place. If only a few plinths or bases are deteriorated, it is often economical to have new ones made of wood to match. If numerous plinths and bases are deteriorated, replacing with bases made of rot-resistant materials can make economic sense; however, care must be taken to ensure that all the visual qualities including design, size, shape, color and texture of the historic part are matched (Fig. 11).

Entire columns may need to be replaced, but an owner should first consider all repair alternatives. Some contractors routinely recommend complete replacement of one or all columns due to the challenge of a clean repair (particularly with stave-built columns), or because they see the potential for more profit in complete replacement. If a contractor recommends complete

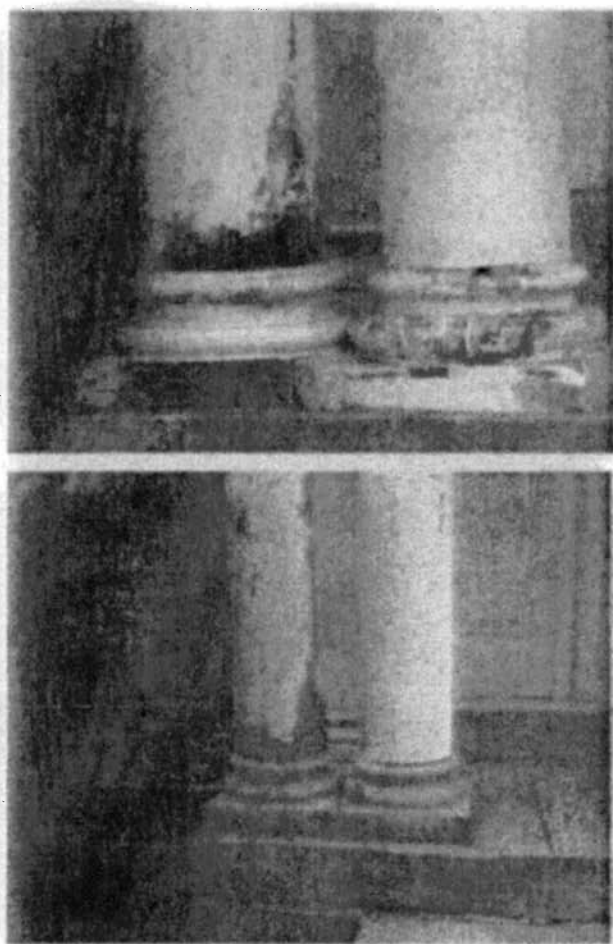


Figure 11. The lower shaft of the porch columns had decayed as water wicked up through the end grain (top). The column shafts were repaired in place by cutting out the deteriorated wood and making repairs using epoxy consolidants and fillers (bottom). The column bases were replaced. Photos: Paul Marlowe, Marlowe Restorations.

replacement, other opinions should be sought to ensure repair is truly not feasible. Preserving the historic appearance of old columns is not the same as preserving historic columns.

Where a replacement turned or staved column is needed, a local millwork may be able to match the profile or pattern. Alternatively, the Internet is helpful in identifying potential sources of replacement columns that can match the appearance of the remaining ones.

Replacement Materials

Wood

When selective replacement is necessary, the key to success is the selection of suitable wood. Dimensional

stability, decay resistance and paint holding ability are wood characteristics that effect durability. Wood that expands and shrinks too much can cause paint to crack. Substances found naturally in certain kinds of wood repel fungi and insects that destroy wood. Selecting wood that is relatively stable and naturally decay resistant helps avoid problems.

The wood from trees cut one and two centuries ago was much different than most wood available today. The mature trees in older forests grew very slowly and, as a result, the annual growth rings were very close together. Today, trees grown by commercial companies for their lumber are fast growing so they can be harvested sooner. As a result, commercially farmed trees have annual growth rings much further apart, resulting in the cut lumber being less strong and decay resistant than older timber. These differences in quality are one of the reasons it makes sense to save old wood when possible.

Wood Selection: When choosing wood for repair and replacement work, the species, grade, grain and environmental impacts should be taken into consideration. This is especially applicable to historic porches because of their high exposure to the weather and vulnerability to decay. The best species are those with good natural resistance to decay, such as redwood, cypress, cedar or fir. A clear (knot free) grade of wood is best; however, if clear wood is not readily available or too expensive, a grade with small or tight knots is acceptable. Finally, the use of more stable vertical grain lumber is preferable to flat grain boards. Vertical grain lumber expands and contracts less with changes in moisture content, resulting in reduce warping and checks. Paint thus will hold better. The downside to using vertical grain boards is the cost, which tends to be as much as two to three times the price of flat grain lumber in the same grade and species. However, this expense is typically recovered through lower maintenance costs over the years. Thus, a decay-resistant, high-grade, vertical grain lumber is the best choice for the replacement of deteriorated porch elements, particularly flooring, stairs and milled elements such as balusters and moldings.

The best species to choose will vary depending on the region the house is located. For example, in the South, cypress is more available, making it the selection of choice in the region. Because of this wood's relative ease with which a carpenter can shape it, cypress is a good choice for replacing brackets and trim boards on a porch. In contrast, vertical grain Douglas fir is less workable, but is a very good choice for the replacement of porch floorboards in most climates. Although Douglas fir is from the Northwest, it is generally available throughout the country. For most protected trim boards on porches, white pine is a good choice as it is easy to work and is moderately decay resistant, especially if the wood is back-primed before installation. Availability of any specific wood will change annually based on market supply and demand.

Wood Characteristics

Species	Cut or Grade	Cost	Workability	Resistance to Decay	Resistance to Cupping	Paint Holding Ability
Redwood	Clear, Vertical-grain, all-heart	\$15	Fair	Excellent	Excellent	Excellent
	"B" Select, flat-grain	\$5	Fair	Excellent	Good	Good
Cedar	Clear	\$5	Fair	Excellent	Good	Fair
Cypress	Clear	\$5	Fair	Excellent	Fair	Good
Douglas Fir	"C" & better, Vertical-grain	\$5	Fair to Poor	Good to Fair	Excellent	Fair
Southern Yellow Pine	"D" Select, flat-grain	\$	Fair	Fair	Good	Fair
	Vertical-grain	\$55	Fair	Fair	Excellent	Fair to Good
Eastern White Pine	"D" Select, flat-grain	\$	Excellent	Fair	Excellent	Good
	Vertical-grain	\$55	Excellent	Fair	Good	Excellent
Poplar	Firsts and Seconds	\$	Good	Poor	Good	Fair
American Mahogany	Clear	\$55	Excellent	Excellent	Excellent	Good

This table summarizes the characteristics of just a few of the different species available, including the workability of the wood (indicating a better wood for decorative porch pieces), the resistance to decay (an important feature for all porch components), resistance to cupping (a wood highly resistant to cupping is a better choice for floor board replacement) and paint holding ability. The Cut or Grade is also listed, as a low-grade wood can perform very differently than a higher grade in the same species. Cost will vary depending on region and market supply and demand. In general, it is best to contact two or three local lumberyards to find the available woods with the characteristics needed in the wood market. Source: Practical Restoration Report, Exterior Woodwork Details.

Chemically Treated Wood: Chemical wood preservative treatments are available to resist insect and fungal attack, but care should be taken to avoid using ones that may cause environmental or health risks. Borate preservatives can be applied to surfaces or injected to penetrate and protect the entire volume of the wood. Preservatives with zinc naphthenate can be applied to the wood surface, where necessary, especially to protect hidden joinery and the end grains of wood. Water-repellants can also be used to help seal out moisture. Finally, primers and paints should be applied to both protect the wood and to maintain the historic character of the porch. Note that these treatments are different than those used on most pressure-treated wood, which is typically a plantation-grown southern pine of lower quality that is impregnated with chemicals. Pressure-treated lumber can be effective when used for hidden structural members like posts, joists and sills. However, because typical pressure-treated wood is very susceptible to the deterioration of checks, warping and splitting, especially when left unpainted, it is not a good substitute for the better quality wood that is needed for visible finish porch parts.

Stock Components

For over a century, prefabricated architectural parts have been sold through catalogues or at home improvement stores. Some companies still make generic, stock architectural components in the same general sizes and designs as those that were first manufactured. These components can be available in both wood and substitute materials. Thus, it may be possible to replace a historic stock component, such as an architectural grade column, with a new prefabricated column that matches the original. Unfortunately, these replacement parts are not designed to match the historic parts of any particular porch. Because traditionally there were many different porch elements, a wide range of styles and considerable regional variations, stock replacement parts available today are not often found to match what is needed in a specific porch repair project. When faced with deterioration of a few porch parts, all the historic material should not be removed in favor of a readily available stock design that does not match the historic appearance. The expressed goal may be to create a porch with a "consistent look," but this approach diminishes the building's historic character and authenticity.

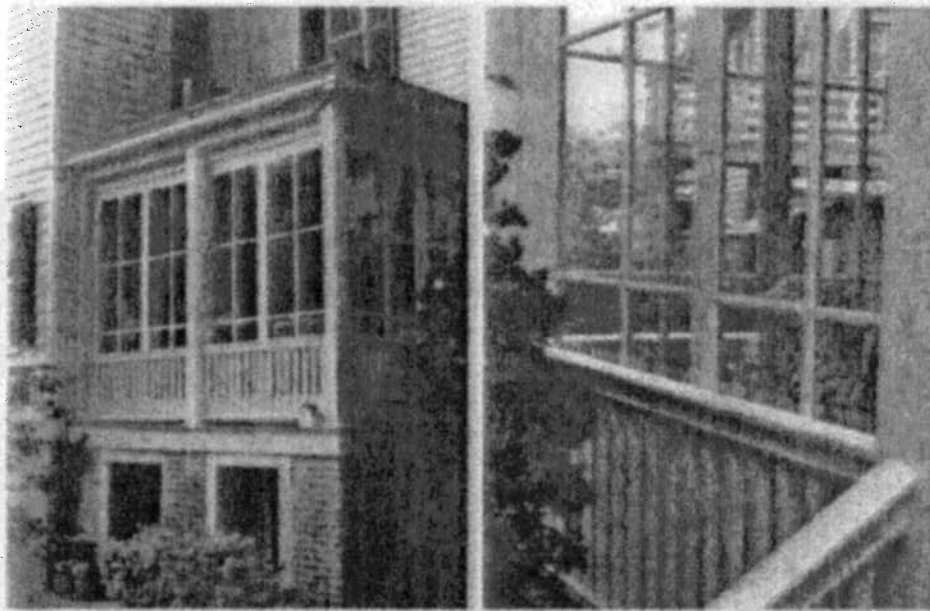


Figure 12. This old porch enclosure, located on the back side of a house, has acquired significance over time and is remarkable both in the appropriateness of its detailing for use by others today, as well as its high degree of maintenance. The enclosure is set behind the columns; the balustrade has been retained; and the light divisions and the size of the glass panes echo that of the windows above. Within each bay there are two well-crafted, inward-swinging doors, providing for greater seasonal use of the porch. Photos: Charles Fisher.

Plastic and Composites

A variety of modern materials are marketed today as a substitute for wood. They are usually composite materials typically in the form of plastic resins, including vinyl (PVC), fiber-reinforced polymers and polyester resin. There are other products on the market as well, including medium density wood fiberboard and composite fiber-cement boards. The market is ever changing with the introduction of new synthetic materials and the re-formulation of existing ones. The more costly synthetic products tend to offer the best potential for matching historic features while offering good durability. This means that potential cost savings over new wood tends to be more long term than immediate. Such products generally are not carried in local home improvement stores but rather are available from building supply companies or direct through catalog sales.

The historical significance of a particular property and its porch influences decisions regarding possible use of substitute materials. In general, greater emphasis is placed on authenticity and material integrity when maintaining and repairing individually significant historic properties. However, a front porch that is repeated on rowhouses may be one of the defining characteristics of the historic district and thus of importance to the entire streetscape. So, too, can the location and appearance of a porch influence material decisions, as with, for example, a prominent front porch with ornate detailing as opposed to a small porch over a rear door.

Thus, when the historic porch contributes to the historic character of a building, the particular substitute material that is being considered should accurately match the appearance of the wooden feature being replaced. Composite materials that can be routed or shaped in the

field to match specific pieces being replaced have greater potential for use in repairing a historic porch. Materials that cannot be shaped to match the visual appearance of the historic pieces being replaced usually are not suitable for use on historic buildings.

Substitute materials need to be finished to match the appearance of the historic elements being replaced. In nearly all cases, this means that the material should be painted, or where historically appropriate, stained as with some porch ceilings. While there are substitute materials being marketed as pre-finished with either a plain flat surface or generic wood-grain texture, select those that can be painted or stained in the field.

When a substitute material is to be used in conjunction with existing or new wood material, it is important to consider the differences in expansion and contraction due to temperature and moisture changes. Before making a decision, it is also important to understand how a particular substitute material will age, what its maintenance requirements are, and how the material will deteriorate. For example, sunlight can break down exposed surfaces of plastic resins, so painting the surfaces is needed just as with wood. Low and medium density plastic foam parts are easily damaged by abrasion and physical damage, exposing the interior foam to weathering.

Wood porches are just that, porches made out of wood, just as a brick houses are made of brick and cast-iron porches are made of cast-iron. The type of materials used historically in the construction of a building helps define its character. Limited use of substitute materials that closely match missing or deteriorated features may not endanger this historic character, but wholesale replacement with substitute materials usually will.

Considerations for Contemporary Alterations

Enclosures

Much of the character of a historic open porch is clearly its openness. Therefore, in most cases, a historic open porch should not be enclosed. If a porch enclosure is being considered, its significance and location—as well as the nature of the planned enclosure—play key roles in whether it can be done without changing the porch's and building's historic character. While it is almost never appropriate to enclose a front porch on a historic building to create interior space, enclosing a less prominent porch on a less visible elevation could have less impact. In addition, an enclosure should retain as many of the historic porch features as possible (Fig 12).

Insect Screening and Awnings

Traditionally, the seasonal use of porches was extended with screens and awnings. Screened porches have been popular since the advent of inexpensive and durable wire insect screening in late 1800s. Screens were often set unobtrusively behind railings and columns so the decorative components of the porch remained prominent and visible. Since screens can be damaged easily, the screening material was often set in slender, easy to repair, removable wood frames that could be installed during the warmer months, and stored in the winter. When screening a porch today, this historic precedent is recommended. Screened panels should have minimal wood framework painted either to match the porch or in a darker color to make the framing less visible. Decisions on whether screens should be installed inside the porch railings and posts, between the posts, or on the outside will depend on local traditions and on the design of the porch and trim. Screen doors on porches should be sized to fit proportionately with the porch, made of wood, and hung to swing out so insects are not brought inside with use.

Awnings, drop curtains, and valances were common porch accessories during the nineteenth and well into the twentieth centuries. Both functional and decorative, these canvas features helped shield porches from the sun's direct rays, while their colorful stripes embellished and complemented the house's exterior. Some awnings were fixed in place; others were of a roller assembly that allowed owners to easily lower or retract the awning, depending on weather conditions.

Today, modern solution-dyed acrylic fabrics—materials that resemble, but are more durable than canvas—are often used on porch awnings and drop curtains. When new awnings are installed on a historic porch, the selected awning should be appropriate in shape, material, size and color. Care should be used not to damage existing historic porch features such as columns or cornices.

Temporary Enclosures

Temporary enclosures allow a porch to be used in colder

months while not permanently altering its appearance. In fact some have become historic features of buildings. Particularly in New England, there is a continuing tradition of installing relatively substantial glass and wood panels on porches during the winter, especially around an entrance door. These tended to have small divided lights. Sometimes porches were fully enclosed with a divided light glass door for entry, creating an enclosed vestibule that reduced the amount of cold air entering the house when the door was opened. Others consisted of simple sidewalls perpendicular to an existing entrance door, serving as a windbreak. Such enclosures were generally removed in the spring (Fig. 13).

In recent years, some porches have been enclosed during the winter with plastic sheeting (polyvinyl) for perceived energy conservation or for creation of an enclosed space. Such a treatment generally diminishes a building's historic character and is not recommended for highly visible porches.

New Permanent Enclosures

Enclosure of a historic porch can result in significant changes in the appearance and character of the building. When considering the possible enclosure of a porch, a number of questions and concerns should be successfully addressed.

Is the porch on a significant elevation of the building? A porch on a prominent elevation was there to be seen and its open qualities are visually important. Enclosing such a space should be avoided.



Figure 13. Particularly in New England, there is a cold weather tradition of installing temporary glass and wood panels at entrance doors, thereby creating an enclosed vestibule. These enclosures with their small divided lights were generally removed in the spring. Photo: John Leetz.

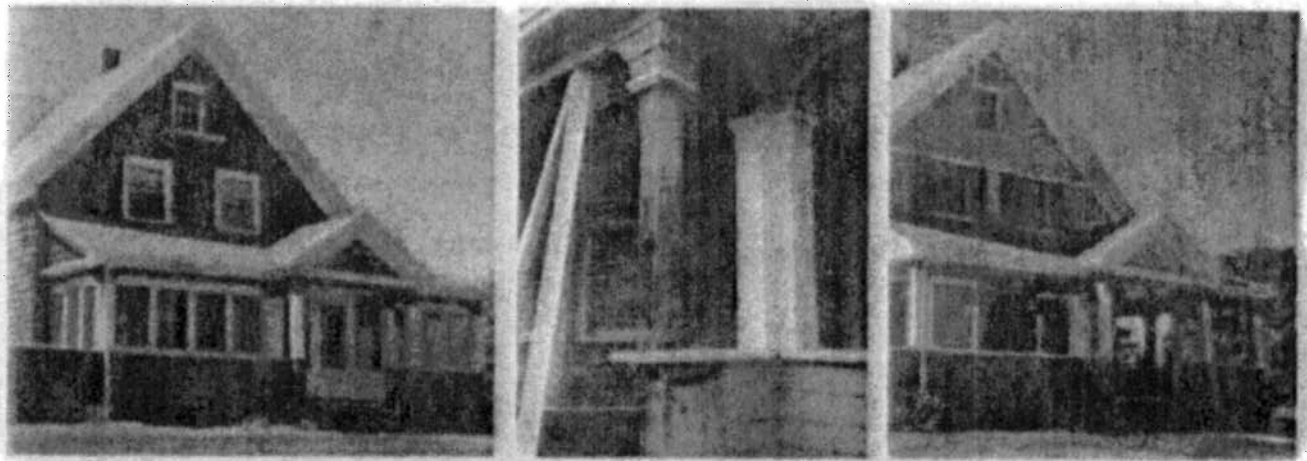


Figure 14. The enclosure of a prominent porch can dramatically change the historic character of a building. The L-shaped porch on this 1896 Shingle-style New England residence was later enclosed with aluminum windows and screens. Recent owners elected to reopen the historic porch. Among the other work, it was necessary to correct structural damage, as with this post, where beneath the wood casing carpenter ants had done serious damage. In reopening the porch, the historic character of the residence has been brought back and the traditional use of the porch is once again enjoyed. Photos: Mark Landry, Landmark Services.

Is the enclosure necessary? An enclosure will undoubtedly change the porch as a historic feature and may result in damage or loss of historic materials. Depending on the significance of the porch and the nature of the building, a new porch enclosure may also change the historic character of the building. Consideration should be given to alternate solutions such as recapturing underutilized space in an attic or basement (Fig 14).

Is the porch a highly distinctive feature of the building? Even porches on secondary and rear elevations can be distinctive, such as a two-story porch on the side ell of a farmhouse. Porches ornamented with decorative trim that embellishes the house can also be distinctive. Enclosing these features should also be avoided whenever possible.

Is the porch a feature repeated on a row of buildings in a historic district? Open front porches on a block of row houses can be not only important to an individual building but can also make up a significant feature of the streetscape. Enclosing such a porch usually is inappropriate even if a porch on an adjacent building already has been enclosed.

Will the proposed enclosure encompass the entire porch? History has shown that the enclosure of a portion of a porch on a secondary elevation does not always alter the character of a building. In the past as indoor plumbing was introduced to old buildings, the partial enclosure of a one or two-story porch on a secondary elevation was a convenient means of providing new bathroom space while limiting disruption to the building's interior. Since early bathrooms were traditionally small in size, most of the existing porch could be retained as open space. It was common to create new walls set either between columns

or behind them, since the columns usually served a structural as well as decorative purpose. Where sleeping porches with full-length louver shutters were present, the new wall could simply be set behind and the shutters retained and fixed in place. In both cases the resulting effect minimized the impact of the partial enclosure on the appearance of the building. This also provides us with an approach that may be appropriate for a particular project today.

Will the enclosure result in the loss of considerable historic fabric? Unless the historic porch is so deteriorated that it is beyond repair, any consideration of enclosing all or part of a porch should incorporate retention of historic fabric. This may mean that the existing structural system needs to be augmented but generally not replaced. Distinctive features such as columns, brackets and balustrades should be retained and the new wall set behind them.

Is the foundation adequate for the enclosure of the porch and the new use of the space? Porches were often built on simple posts or piers, some with only minimum footings. Such structural supports may be inadequate to carry the added load of the proposed changes and the typical low space beneath a first floor porch may make installing a new porch foundation difficult and expensive. Such installations may result also in an extensive loss of historic fabric.

How will the proposed enclosure be viewed from the outside once the interior space is furnished? One of the approaches to enclosing a porch is to utilize near full glazing set behind existing columns in an attempt to retain a feeling of transparency. Whether such a treatment is successful depends on how it will look once it is constructed and how will the appearance on the outside be impacted by interior lighting.

mechanical systems and furnishings. The traditional use of plantings and porch awnings for shade also provided extended privacy. If historically appropriate, an existing or new awning and plantings may help to reduce the impact of a porch enclosure on a secondary but visible elevation.

Is the design of the proposed porch enclosure in keeping with the historic character of the building? Where the enclosure of all or part of a historic porch is appropriate, the selection of a compatible design and materials is important. Windows, doors, and wall material selection, along with how the new infill fits within the existing porch, are all factors to consider. A traditional technique of porch enclosures still used today involves the insertion in each column bay of one or more glass enclosures set in wood frames. The enclosures are located between or behind the columns, depending upon the nature of the porch, and mimic the pattern or size of glass panes found in historic windows on the building (Fig 15). An alternate treatment involves the use of much larger sheets of clear, non-reflective glass recessed behind the porch supports, balustrade and railing. This more contemporary treatment may be appropriate, depending upon the historic character of the building, location of the porch, and other factors (Fig. 16). Windows, doors, and wall material selection, along with how the new infill fits within the existing porch, are all factors to consider.

Safety and Building Codes

There are many building codes used by states and municipalities across the nation, with a majority of their requirements being very similar and focused on new construction. Building codes such as the International



Figure 15. A traditional technique of porch enclosures still used today involves the insertion in each column bay of one or more glass enclosures set in wood frames. This enclosure is properly set back an entire porch bay from the front of the house and utilizes traditional light divisions and wood frames. The balustrade, added here for illustration purposes, shows the importance of retaining this linear feature within the enclosed bays. Photo: Charles Fisher.

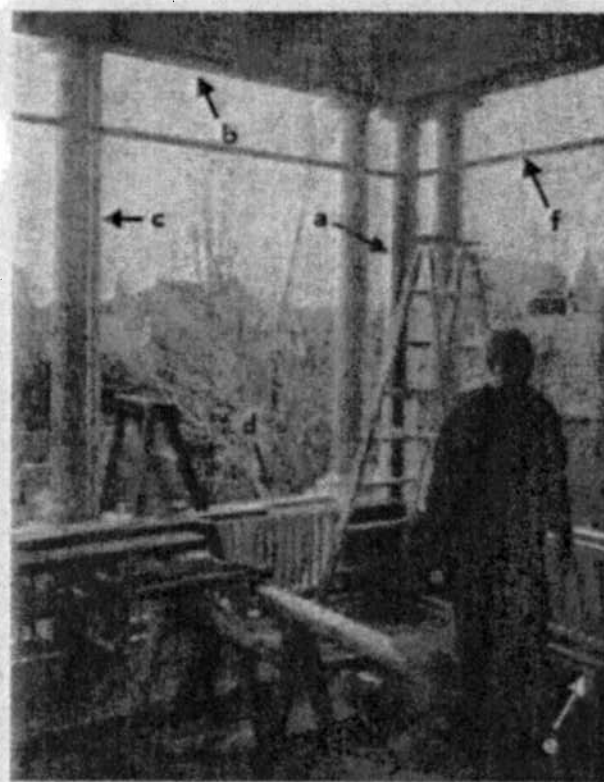


Figure 16. The use of near full glazing to enclose a porch may be appropriate depending upon the historic character of the building, location of the porch, how the interior space is to be treated, and other factors. This enclosure of a rear porch to create a conference room successfully utilizes large expanses of glass and narrow metal framing set behind existing porch elements (a through e). Where an additional horizontal support was needed (f), the frame was placed at a location that is found in many traditional insect screen enclosures. Photo: Charles Fisher.

Building Code and its companion, the International Existing Building Code, have been developed in recent years that are generally much more sensitive to existing and historic buildings, emphasizing the retention of historic fabric without jeopardizing life safety. These "proportional codes," as they are called, allow building inspectors greater flexibility to make decisions based on the specific circumstances of each building, and the type and extent of work planned.

Successful rehabilitation work achieves a balance between building and safety code considerations and the retention of historic design and materials. The porch is no exception. The most common porch elements affected by code requirements are railing/balustrade height, baluster spacing, stair geometry, and structural system. When a historic porch is so deteriorated that a substantial portion must be replaced, modern building code requirements are usually triggered. These requirements are often more stringent for multi-family or commercial structures than single-family houses.



Figure 17. The porch's structural system must be capable of supporting today's loads. In this case moisture led to the deterioration of the wood girder at the corner, creating a major structural deficiency (top). A new solid timber was installed to replace the girder (middle); alternatively a built-up girder could have been used since a fascia board would conceal it. The column base was repaired and portions replaced and the balustrade and column reset and secured (bottom). Photos: Paul Marlowe, Marlowe Restorations.

It is important to ensure that the code-required work be done in a manner that is sympathetic to the historic character of the building. If building code requirements threaten the historic character of the porch, alternatives that reconcile the two should be explored. Many local jurisdictions issue waivers or variances for historic buildings, allowing for historic elements to be retained, when it can be demonstrated that safety will not be compromised.

In the event that an alteration to a historic porch is required to make the porch safe to use, care should be taken in planning and undertaking the work. Fortunately, there are usually a number of options that are possible, although one is usually the most appropriate preservation solution.

Structural Loads

Ensuring that the structure's foundation can support the specified load is a primary safety issue for porches. Fortunately, repairs and upgrades to improve structural stability are generally made to the foundation at or below grade, and can usually be concealed under the porch or behind finish details. Weakened joists can often be strengthened with the addition of sister joists, epoxy structural repair, or the insertion of new concealed structural members (Fig. 17).

Stairs

Historic stair risers are sometimes too steep and treads too shallow to meet contemporary building codes or the special needs of the occupants. In the latter case, the addition of a simple handrail that meets code may suffice. In instances where there is another stairway that meets code, for example a side stair, it may be possible to retain the existing non-conforming historic stairway.

Modifications to bring porch stairs into conformance with code can be difficult. Where buildings are set close to the street, it may not be possible to rebuild the stairs in the same direction to meet code if they will have to extend onto a public sidewalk. Unless a variance is obtained, it may be necessary to turn the stairs to be parallel rather than perpendicular to a building. Where wood stairs need to be rebuilt, the historic finish details, such as moldings, cut work and edge detailing, should be reflected in the new construction. One common mistake is the replacement of wood stairs or brick steps with concrete, a material that may not be in keeping with the historic building.

Where a porch must be used as a wheelchair accessible entrance, two general issues arise. If there is an elevation difference greater than 1/4 inch between the porch deck and the front door threshold, a simple threshold ramp may suffice. In cases where the elevation difference is larger than can be accommodated by a simple threshold ramp, a level platform with sufficient turning radius at the door for a wheelchair may be necessary. The other issue is devising a means for wheelchair access from the grade to the porch deck when the porch is the only

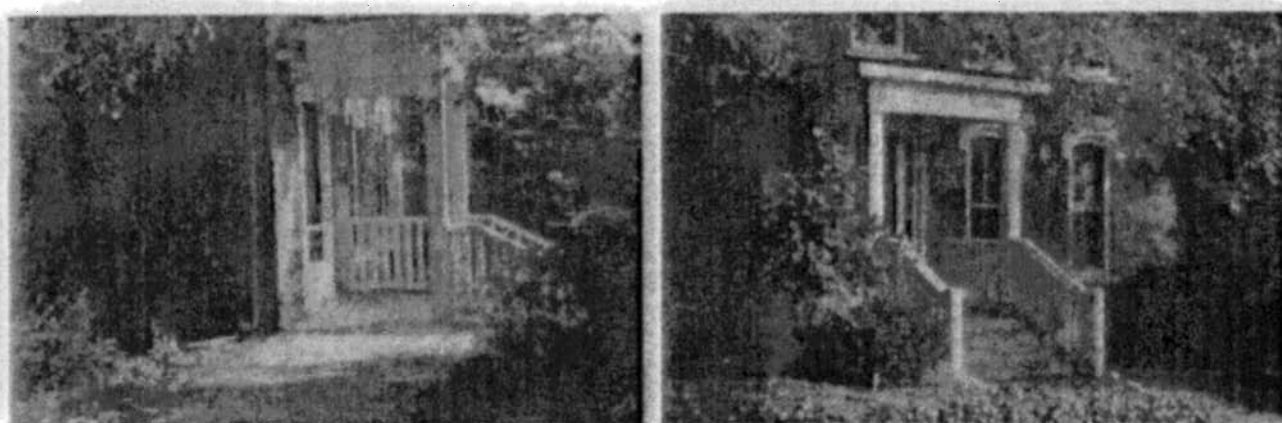


Figure 18. When a porch is used as a wheelchair accessible entrance, it may be possible to retain the historic stairs by adding a ramp parallel to the building. Through plantings and some re-grading, the new ramp built parallel to the building (left) allows retention of the historic stairs and does not impact the historic character of the entrance (right). Photo: Iowa State University Extension.

entrance alternative. It may be possible to retain the historic stairs by adding another entrance to the porch with the construction of a ramp parallel to the building (Fig. 18).

Baluster Spacing

Codes generally require for children's safety that new balusters are spaced such that a four-inch sphere cannot fit through. Vertical balusters on older porches are often spaced farther apart than this. If modifications are required, inserting narrow metal rods between the existing balusters may be a compatible and inconspicuous solution, particularly if painted flat black or another dark color. This is generally preferable to moving the balusters closer together or adding more balusters to fill the gaps.

Railing/Balustrade Heights

Historic porches generally have handrails that measure 28 to 30 inches in height from the floor. Current code requirements for new construction generally mandate that railings be 36 to 42 inches in height (often 36 inches for single family dwellings, and 42 inches for multi-family dwellings and commercial buildings). Raising the historic railing by as much as 30% or more can have a major impact on not just the proportions of the balusters, but also on the overall appearance of a historic porch. Adding a simple rail above the historic railing and painting it to hide its presence as much as possible is generally the least intrusive solution when this safety requirement must be met. Similarly, an existing bottom rail is sometimes set too high off the deck to meet contemporary code requirements. The addition of a simple wood rail or even a narrow metal pipe below the bottom rail will usually suffice (Fig 19).

It is not uncommon to find historic porches with decks only several steps off the ground and with no railings. For owner-occupied residences undergoing rehabilitation, local codes usually will not require the

addition of railings to these existing porches, provided the porch deck is below a certain height off the ground—typically from 18 to 24 inches. Where greater safety is warranted even though no railing is required, alternatives such as planting an adjacent hedgerow, installing planter boxes between columns, or raising the grade are worth considering. Where not practical or acceptable, a railing might be added so as to not noticeably impact the appearance of the historic porch. Any solution, however, should be simple and based on the character of a specific porch, and its appropriateness considered on a case-by-case basis.



Figure 19. Historic porches generally have railings that measure 28 to 30 inches in height from the floor. When additional height is necessary for safety, a simple rail, added for illustration purposes in this photograph, can usually be installed above the historic railing. Not only does this treatment allow retention of the historic balustrade, but it also has a minimum impact to the appearance of the porch. Photo: Charles Fisher.

Conclusion

Wood porches have made an enduring contribution to our built environment. Porches are significant because of the special character they impart to a historic building and their role in our social and cultural history. A porch is an open sheltered part of a building, providing a covered entrance and, where larger, serving as an outdoor activity room. It represents an outward extension of a building, a place guests can initially be sheltered from the weather, even welcomed and entertained.

Like all historic building features, wood porches require routine maintenance to prevent decay. Understanding how a porch is put together and the factors that cause deterioration will help considerably in carrying out both maintenance and needed repairs. Regular maintenance pays off not only with a good appearance but also by reducing the need for future repairs. With both maintenance and repairs, emphasis should be placed on preserving the historic fabric and significant features of a porch. Where components are deteriorated beyond repair or missing altogether, new pieces should be installed that match the historic ones. Fortunately, good craftsmanship and the use of quality replacement materials as needed will be rewarded with repairs that last. Attentive care will result in the historic porch retaining its charm both in appearance and in function.

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Bibliography

- Davis, John Michael. "Exterior Trim Details That Last," *Fine Homebuilding*, August/September 2001.
- Fisher, Charles E. and Hugh C. Miller, eds., *Caring for Your Historic House*, New York, NY: Harry N. Abrams, Inc., 1998.
- Kitchen, Judith L., *Caring for Your Old House: A Guide for Owners and Residents*, Somerset, NJ: John Wiley & Sons, Inc., 1991.
- Loekee, John C., *Practical Restoration Reports Compendium*, Portland, ME: Historic HomeWorks, 2005.
- Nash, George. "Renovating Old Porches: Common Problems Can Be Solved With Simple Repairs," *Fine Homebuilding*, July 1982.
- Preservation Briefs*, Washington, DC: National Park Service, Technical Preservation Services: 1978–present.
- Preservation Tech Notes*, Washington, DC: National Park Service, Technical Preservation Services: 1984–present.
- Reed, Douglas C. "Detailing Early Porches," *Old House Journal*, May/June 2001 and July–August 2001.
- Visser, Thomas D., *Porches, Piazas & Verandas*, forthcoming.
- Weeks, Kay D., and Anne E. Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*, Washington, DC: National Park Service, 1995.